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Reference:

CLEAN Contract Number N62467-94-D-0888

Contract Task Order (CTO) Number 0192

Subject:

Site Investigation Report

Petroleum Contaminated Area 17 - High Power Turn-up Pad

Naval Air Station Jacksonville, Jacksonville, Florida

Dear Mr. Hansel:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this Site Investigation Report for the High Power Turn-up Pad (HPTP). This report was prepared for the United States Navy (Navy) Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM) under Contract Task Order (CTO) 0192 for the Comprehensive Long-term Environmental Action Navy (CLEAN) Contract Number N62467-94-D0888. The objective of this report is to document results of the Site Assessment (SA) conducted at Petroleum Contamination Area (PCA) 17, HPTP. The SA activities were performed in accordance with the Contamination Assessment Plan for the HPTP dated August 2001 and in general accordance with Chapter 62-770, Florida Administrative Code (FAC). Originally, TtNUS was to provide a Site Assessment Report (SAR) for the HPTP. However, due to the findings of the SA, the Navy directed TtNUS to prepare a letter report for the site in lieu of a formal SAR.

Background Information

The HPTP is located in the northeast portion of Naval Air Station (NAS) Jacksonville near the Gas Hill (Facility 159) Bulk Fuel Storage and Distribution Facility (see Figure 1). The HPTP is located approximately 0.5 mile west-northwest of the Gas Hill (Facility 159), north of the runway, and near the bank of the St. Johns River. This area of the base is covered mostly by grass, with some areas of asphalt and concrete.

In June 1997, when the old A7 HPTP was demolished, a petroleum odor and sheen were observed from the soil and groundwater beneath the concrete pad during excavation. A headspace analysis was performed and determined the soil to be "excessively contaminated" (based on Chapter 62-770, FAC criteria). The source and release date of the contamination is unknown but estimated to be prior to 1978, which was the last time the A7's performed high power turn-ups at the pad. There were no underground storage tanks or aboveground storage tanks at the site, so it was assumed that the contamination was probably the result of releases during pad use.

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When the petroleum-impacted soil was discovered, Bechtel Environmental, Inc. (BEI) removed the contaminated soil and transported the material off site for thermal treatment and disposal. A new S-3 HPTP was constructed in August 1997 at the same location.

A site plan of the current HPTP is shown on Figure 2. TtNUS could not locate any figures showing the location of the previous A7 HPTP. However, it has been reported to TtNUS that the locations of the turn-up pads are the same. In addition, the exact location and extent of excavated soil is unknown.

Site Assessment Activities

Starting in the fall of 2001, TtNUS conducted the SA activities at the HPTP. The SA was conducted in a series of phases. TtNUS mobilized to the HPTP on September 29, 2001 for the first phase of the investigation. The first phase of the investigation consisted of soil and groundwater sampling with the use of direct-push technology (DPT) and media analysis with a mobile laboratory. The second phase consisted of the installation and sampling of three permanent monitoring wells based on the results of the DPT/mobile lab screening. The third phase consisted of the installation of two additional monitoring wells based on the findings of the previous assessment activities. It should be noted that the Navy instructed TtNUS not install any soil borings or monitoring wells in the concrete portion of the HPTP. The concrete pad is steel reinforced and structured to anchor S-3 planes while the engines are fired. Any borings in the concrete pad may have compromised the structural stability of the pad.

Site Lithology

Via DPT, soil samples were collected to a depth of 24 feet (ft) below land surface (bls) at the HPTP for lithological purposes. The HPTP is raised approximately 3 ft above the surrounding environment. The site is mounded and underlain by a layer of sand and gravel fill from land surface to 3 ft bls. A gray clayey sand begins at 3 ft bls and continues to a depth of 8 ft bls. At 8 ft bls, a coarse sand with shells was encountered to a depth of 15 ft bls. At 15 ft bls a greenish clay layer was encountered and continued to the boring termination depth of approximately 24 ft bls. Boring logs are included in Attachment A.

Direct-Push Soil Borings

A soil vapor assessment was conducted on September 29 and 30, 2001. Fifteen soil borings (JAX-HPTP-SB-1 through JAX-HPTP-SB-15) were advanced around the HPTP concrete pad. Soil borings were advanced using a truck mounted, direct-push, hydraulic soil probe. Soil cores were collected using 4-ft long stainless steel core barrel samplers lined with plastic sleeves beginning at approximately 1 ft bls and continued at 4-ft intervals until approximately 1 ft into the saturated zone (typically at 4 to 5 ft in depth). At one boring location (JAX-HPTP-SB-10) soil samples were collected to a depth of 24 ft bls for vertical profiling. Soil boring locations are depicted on Figure 3.

The cores were visually inspected and classified for lithology and evidence of staining. Soil samples were collected from each soil core (from 1 ft bls and 3 ft bls) and screened with an organic vapor analyzer (OVA)-flame ionization detector (FID). Soil vapor analysis was performed in accordance with the headspace screening methodology prescribed by Chapter 62-770.200(2), FAC. A duplicate of the sample from the interval with the highest OVA-FID reading from above the water table was retained and analyzed by an on-site mobile laboratory for benzene, toluene, ethylbenzene, and xylenes (BTEX); methyl tert-butyl ether (MTBE); naphthalene; 1-methylnaphthalene; and 2-methylnaphthalene.

Groundwater Sampling Direct-Push Investigation

During the DPT/mobile laboratory field investigation, each soil boring was continued into the saturated zone to collect groundwater samples for mobile laboratory screening. Groundwater samples were collected from each boring at an approximate depth of 6 to 10 ft bls. At one location (JAX-HPTP-SB-10) a groundwater sample was collected from 20 to 24 ft bls for vertical profiling. The samples were collected

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using a detachable drive tip attached to a 48-inch long, retractable stainless steel well screen encased in the lead probe tube. After the water sampler was advanced into the water-bearing zone, the probe was withdrawn 48 inches to allow the retractable screen to open to the formation. For groundwater recovery, a length of Teflon® tubing was inserted into the probe and connected to a peristaltic pump. Several screen volumes were then pumped from the probe in order to reduce the turbidity level and ensure a representative sample. After purging, the groundwater samples were collected and provided to the on-site mobile laboratory for screening of BTEX, MTBE, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.

Monitoring Well Construction and Development

Monitoring wells were installed in select locations based on the DPT/mobile laboratory screening results. The monitoring wells were placed to provide spatial coverage around the site and to confirm the nature and extent of the hydrocarbon plume at the HPTP area. A monitoring well location map is provided as Figure 4.

Monitoring wells JAX-17-MW-01, JAX-17-MW-02, JAX-17-MW-03, JAX-17-MW-04, and JAX-17-MW-05 were advanced using 4 ¼-inch inside diameter (ID) hollow-stem augers. Each well was constructed of 2-inch ID flush threaded, schedule 40 polyvinyl chloride (PVC) solid riser and 0.010-inch slot well screen with a silt trap and well bottom cap.

The monitoring wells were installed to approximately 13 ft with a 10-ft screened interval. Each annulus was filled to approximately 2 ft above the well screen with US Standard Sieve size 20/30 silica sand. The 20/30 sand was capped to about 1 ft bls with 30/65 sand. The remainder of the annulus was grouted to the surface with a cement/bentonite grout. Each well was secured with a locking, watertight cap within a steel, 8-inch diameter steel manhole. The manhole was set within a 24-inch square apron finished slightly above grade. Well completion logs are provided in Appendix A.

Each well was developed using a submersible pump. During well development, field measurements of pH, temperature, and specific conductance were monitored from the purge water generated. The wells were developed under supervision of a geologist up to a maximum of 1 hour or until the field measurements became stable and the purge water clear. Water quality stabilization was determined using the following criteria: temperature ±5 degrees Celsius (?C), pH ±0.1 unit, and specific conductance ±10 micro-ohms per centimeter (µmhos/cm). All development water was containerized for disposal in 55-gallon steel drums.

Water Level Measurements

Water level measurements were collected to determine the depth to water in the surficial aquifer and to determine the relative groundwater flow direction. The depth to water measurements for monitoring wells JAX-17-MW-01 through JAX-17-MW-03 were measured on October 24, 2001, and monitoring wells JAX-17-MW-01 through JAX-17-MW-05 on January 3, 2002. Measurements were collected from the north rim of the top of well casings using an electronic water level indicator. During the January measurement, the water was at the top of the well in JAX-17-MW-02 and JAX-17-MW-03. There was no measurable difference between the top of casing and the groundwater elevations. However, the well did not appear to be artesian. Depth to water measurements are provided in Table 1. A potentiometric surface map for the January 2002 sampling event is provided as Figure 5.

The elevation of the north rim for each top of well casing (JAX-17-MW-01, JAX-17-MW-02, JAX-17-MW-03, JAX-17-MW-04, and JAX-17-MW-5) was surveyed relative to each other by TtNUS personnel with respect to an assumed vertical datum. The top of casing elevation of each permanent monitoring well was surveyed relative to each other and referenced to site features. The groundwater elevation was calculated by subtracting the depth to water from the top of casing elevation.

Groundwater Sampling of Monitoring Wells

Groundwater sampling of monitoring wells was performed to determine the presence or absence of dissolved petroleum hydrocarbons in groundwater in the vicinity of the HPTP. TtNUS personnel collected groundwater samples from MW-01 through MW-03 on October 24, 2001 and from JAX-17-MW-04 and JAX-17-MW-05 on January 3, 2002. The groundwater samples were analyzed for volatile organic compounds VOCs using United States Environmental Protection Agency (USEPA) Method 8021B, polynuclear aromatic hydrocarbons PAHs) using USEPA Method 8310, total recoverable petroleum hydrocarbons (TRPH) using Florida-Petroleum Range Organics (FL-PRO), ethylene dibromide (EDB) using USEPA Method 504.1, and total lead using USEPA Method 6010. Prior to sampling, approximately three to five well volumes of groundwater were removed from each well using low flow quiescent purging methods. Temperature, pH, specific conductance measurements, and well purge volumes were recorded at the time of sample collection. Groundwater samples were placed on ice and shipped to Accutest Laboratories in Orlando, Florida.

Monitoring wells JAX-17-MW01 through JAX-17-MW-05 are referred to as, and correspond with, HPTP-MW-01 through HPTP-MW-05 in the laboratory analytical data packages provided in Appendix C.

Soil Vapor Analysis Results

The potential for petroleum impacted soil in the vadose zone was assessed through soil headspace analysis. The results of the soil vapor screening, presented in Table 2, indicated soil at eight soil boring locations contained hydrocarbon vapors above 50 parts per million (ppm). For diesel fuel sites, soils exhibiting an OVA response of greater than 50 ppm are considered "excessively contaminated" as defined by Chapter 62-770.200, FAC. The 50 ppm criteria was used, as the most likely source of hydrocarbon contamination at the site is jet fuel.

Mobile Laboratory Soil Sampling Results

For soil screening at the site, a soil sample was collected from each soil boring and provided to the onsite mobile laboratory. The samples were analyzed for MTBE, BTEX, naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene. No constituents were detected in any of the soil samples analyzed by the mobile lab. The complete set of analytical results is presented in Attachment B. A summary of the mobile laboratory results is presented in Table 3.

Fixed-based Laboratory Soil Sampling Results

Three soil samples from soil borings SB-05, SB-10, and SB-11 (SB05-S03, SB10-S03, and SB11-S03) were collected for fixed-based laboratory analysis on September 30, 2001. The soil samples were collected; placed on ice; shipped to Accutest Laboratories in Orlando, Florida; and analyzed for VOCs using USEPA Method 8021B, PAHs using USEPA Method 8310, and TRPH using FL-PRO. Results of the laboratory analysis indicated the presence of petroleum compounds. However, no constituents were detected above the established soil cleanup target levels (SCTLs). A summary of detected constituents is presented in Table 4. The complete set of analytical results is presented in Attachment C. A comparison of soil vapor readings with confirmatory soil analytical results indicates that "excessively contaminated soil" is not present at the HPTP.

Groundwater Results

The mobile laboratory groundwater analytical results, provided on Table 5 and presented on Figure 6, indicate three PAH constituents (naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene) exceeded FDEP groundwater cleanup target levels (GCTLs) in boring SB10. Mobile laboratory groundwater analytical results are located in Attachment B.

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Groundwater samples collected from the permanent monitoring wells were placed on ice and shipped to Accutest Laboratories in Orlando, Florida for fixed-based analysis. The samples were analyzed for VOCs using USEPA Method 8021B, PAHs using USEPA Method 8310, TRPH using FL-PRO, EDB using USEPA Method 504.1, and lead using USEPA Method 6010. Analytical results indicated vinyl chloride in groundwater samples from MW-03 [2.3 micrograms per liter (μ g/L)] and MW04 (6.7 μ g/L) exceeded the FDEP GCTL of 1 μ g/L. No additional parameters were detected above their established GCTLs. Monitoring well groundwater results are summarized Table 6 and presented on Figure 7. The complete set of analytical results is presented in Attachment C.

Conclusions and Recommendations

Data obtained during the field screening at HPTP indicated headspace readings greater than 50 ppm. However, "excessively contaminated" soil was not confirmed by laboratory soil analysis. The groundwater samples collected during the DPT/mobile lab screening indicated the presence PAHs in excess of FDEP GCTLs from one soil boring location (SB-10). However, groundwater samples collected from permanent monitoring wells indicted dissolved PAHs are not present above FDEP GCTLs at the HPTP. The presence of vinyl chloride, in MW-03 and MW-04, indicates the presence of chlorinated solvents at the site. A potential source of chlorinated solvent contamination is thought to be the servicing of planes at the site during routine repairs while testing.

As a result of the HPTP SA, TtNUS recommends that this site no longer be evaluated under the petroleum contamination program. The lack of typical petroleum compounds and the presence of chlorinated solvent constituents detected above GCTLs indicates that it may be necessary for the NAS Jacksonville Partnering Team to consider to further investigation of the site under the Installation Restoration (IR) program.

Sinderely,

fask Order Manager

Attachments (5)

cc:

Dana Gaskins, SOUTHNAVFACENGCOM (CD only)
Jorge Caspary, FDEP (hard copy, CD)
Frank Sigona, NAS Jacksonville (hard copy, CD)
D. Wroblewski (letter only)
M. Perry (unbound copy, CD)
File – CTO 192

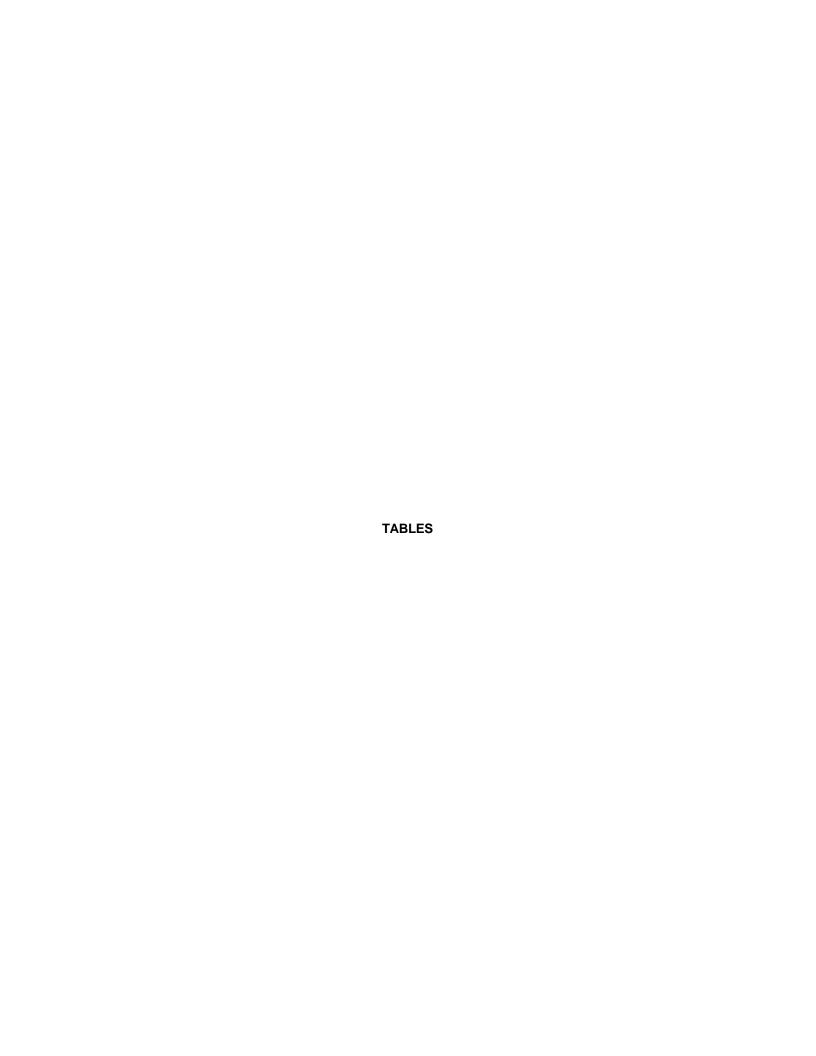


TABLE 1 WATER TABLE ELEVATION AND MONITORING WELL CONSTRUCTION DATA

PCA 17 - HIGH POWER TURN-UP PAD NAVAL AIR STATION JACKSONVILLE JACKSONVILLE, FLORIDA

			October	24, 2001	January 3, 2002		
Monitoring Well ID	Screened Interval Depth (ft bis)	Top-of-Casing Elevation (ft) ⁽¹⁾	Depth to Water Below Top-of- Casing (ft)	Water Elevation (ft)	Depth to Water Below Top-of- Casing (ft)	Water Elevation (ft)	
JAX-17-MW-1	2.5 to 12.5	14.50	4.80	9.70	3.54	10.96	
JAX-17-MW-2	2.0 to 12.0	10.83	1.26	9.57	0.00	10.83	
JAX-17-MW-3	2.0 to 12.0	10.51	0.93	9.58	0.00	10.51	
JAX-17-MW-4	2.0 to 12.0	11.11	NM		0.07	11.04	
JAX-17-MW-5	2.0 to 12.0	10.73	NM		1.28	9.45	

Notes: NM = Not Measured

ft bls = feet below land surface

⁽¹⁾ The wells were surveyed relative to each other by TtNUS staff. The approximate elevations used in this table are based on information provided in the 1993 USGS Topographic Map, Orange Park Quadrangle. The elevation of JAX-17-MW-1 was assumed to be 14.50 feet above mean sea level and the other wells were surveyed relative to it.

TABLE 2 SOIL VAPOR MEASUREMENTS

PCA 17 - HIGH POWER TURN-UP PAD NAVAL AIR STATION JACKSONVILLE JACKSONVILLE, FLORIDA

	Date of	Sample Depth	Hea	pm)	
Soil Boring Number	Measurement	(ft bls)	Total Organic Reading	Carbon Filtered Reading	Net Reading
JAX-HPTP-SB1	9/28/2001	1	NM	NM	NA
		3	358	107	251
JAX-HPTP-SB2	9/29/2001	1	0	NM	0
		3	17.3	71.3	
JAX-HPTP-SB3	9/29/2001	1	0	NM	0
		3	0.8	NM	0.8
JAX-HPTP-SB4	9/29/2001	1	0	NM	0
		3	84.5	223.4	
JAX-HPTP-SB5	9/29/2001	1	33.6	15.9	17.7
		3	1791	624	1167
JAX-HPTP-SB6	9/29/2001	1	0	NM	0
		3	322	379	
JAX-HPTP-SB7	9/29/2001	1	0	NM	0
		3	1468	1241	227
JAX-HPTP-SB8	9/29/2001	1	0	NM	0
		3	41.1	193.2	
JAX-HPTP-SB9	9/29/2001	1	0	NM	0
		3	589	423.2	165.8
JAX-HPTP-SB10	9/29/2001	1	81.2	0	81.2
		3	304.4	197.6	106.8
JAX-HPTP-SB11	9/29/2001	1	102.7	0	102.7
		3	759.4	748	11.4
JAX-HPTP-SB12	9/29/2001	1	136.1	0	136.1
		3	636.2	655.7	
JAX-HPTP-SB13	9/29/2001	1	11.1	0	11.1
		3	1511	1088	423
JAX-HPTP-SB14	9/29/2001	1	0	NM	0
		3	1473	3396	
JAX-HPTP-SB15	9/30/2001	1	0	NM	0
		3	26.1	198.6	

Notes:

Wet Soils encountered at depths ranging from 3.5 to 4 ft.

Bold indicates exceedance

ft bls = feet below land surface NA = not applicable

NM = not measured --- = value not reported because calculation was less than zero

ppm = parts per million

TABLE 3 MOBILE LABORATORY SOIL RESULTS

PCA 17 - HIGH POWER TURN-UP PAD NAVAL AIR STATION JACKSONVILLE JACKSONVILLE, FLORIDA

Sample ID	ССТ! -1	SB 1 SO3	SB 2 SO3	SB 3 SO3	SB 4 SO3	SB 5 SO3	SB 6 SO3	SB 7 SO3	SB 8 SO3
Location	SCTLs ¹	JAX-HPTP-SB-1	JAX-HPTP-SB-2	JAX-HPTP-SB-3	JAX-HPTP-SB-4	JAX-HPTP-SB-5	JAX-HPTP-SB-6	JAX-HPTP-SB-7	JAX-HPTP-SB-8
Date of Analysis	(µg/kg)	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001
MTBE	50	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	1	<10	<10	<10	<10	<10	<10	<10	<10
Toluene	40	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	30	<10	<10	<10	<10	<10	<10	<10	<10
m&p-xylene	20	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	20	<10	<10	<10	<10	<10	<10	<10	<10
1-Methylnaphthalene	20	<10	<10	<10	<10	<10	<10	<10	<10
2-Methylnaphthalene	20	<10	<10	<10	<10	<10	<10	<10	<10

Sample ID	SCTLs	SB 9 SO3	SB 10 SO3	SB 11 SO3	SB 12 SO3	SB 13 SO3	SB 14 SO3	SB 15 SO3
Location		JAX-HPTP-SB-9	JAX-HPTP-SB-10	JAX-HPTP-SB-11	JAX-HPTP-SB-12	JAX-HPTP-SB-13	JAX-HPTP-SB-14	JAX-HPTP-SB-15
Date of Analysis	(m g/kg)	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001
MTBE	50	<10	<10	<10	<10	<10	<10	<10
Benzene	1	<10	<10	<10	<10	<10	<10	<10
Toluene	40	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	30	<10	<10	<10	<10	<10	<10	<10
m&p-xylene	20	<10	<10	<10	<10	<10	<10	<10
Naphthalene	20	<10	<10	<10	<10	<10	<10	<10
1-Methylnaphthalene	20	<10	<10	<10	<10	<10	<10	<10
2-Methylnaphthalene	20	<10	<10	<10	<10	<10	<10	<10

Notes

μg/kg = micrograms per kilogram

¹ Soil Cleanup Target Levels (SCTLs) (from Chapter 62-770, FAC (April 30, 1999))

< = less than method detection limits

TABLE 4 FIXED-BASED LABORATORY SOIL ANALYTICAL RESULTS

PCA 17 - HIGH POWER TURN-UP PAD NAVAL AIR STATION JACKSONVILLE JACKSONVILLE, FLORIDA

	FDEP S		PCA 17					
Compound	Direct Exposure	Leachability Based on	JAX-HPTP-SB05-S03	JAX-HPTP-SB10-S03	JAX-HPTP-SB11-S03			
	Residential	Groundwater	9/30/2001	9/30/2001	9/30/2001			
Sample Interval	_		3 ft bls	3 ft bls	3 ft bls			
PAHs (USEPA Method 8310 Benzo(A)Pyrene	<mark>)) (μg/kg)</mark> 100	8000	46.6J	<74	<76			
FL-PRO (mg/kg) TRPH	340	340	44.9	9.48	<9.4			

Notes:

J = Estimated value less than practical quantitation level

μg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

¹FDEP SCTL = Florida Department of Environmental Protection Soil Clean Target Level Chapter 62-770, FAC (April 30, 1999)

TABLE 5 MOBILE LABORATORY GROUNDWATER RESULTS

PCA 17- HIGH POWER TURN-UP PAD NAVAL AIR STATION JACKSONVILLE JACKSONVILLE, FLORIDA

					,				
Sample ID	GCTLs	SB 1 (4'-8')	SB 2 (6'-10')	SB 3 (6'-10')	SB 4 (6'-10')	SB 5 (6'-10')	SB 6 (6'-10')	SB 7 (6'-10')	SB 8 (6'-10')
Location		JAX-HPTP-SB-1	JAX-HPTP-SB-2	JAX-HPTP-SB-3	JAX-HPTP-SB-4	JAX-HPTP-SB-5	JAX-HPTP-SB-6	JAX-HPTP-SB-7	JAX-HPTP-SB-8
Date of Analysis	(m g/L) ¹	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001
MTBE	50	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	40	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	30	<1	<1	<1	<1	<1	<1	<1	<1
m&p-xylene	20	<1	<1	1.1	<1	<1	<1	<1	<1
Naphthalene	20	<1	<1	<1	<1	1.4	<1	1.0	<1
1-Methylnaphthalene	20	<1	<1	<1	<1	<1	<1	<1	1.2
2-Methylnaphthalene	20	<1	<1	<1	<1	<1	<1	<1	1.1

Sample ID	GCTLs	SB 9 (6'-10')	SB 10 (6'-10')	SB 10 (20'-24')	SB 11 (6'-10')	SB 12 (6'-10')	SB 13 (6'-10')	SB 14 (6'-10')	SB 15 (6'-10')
Location		JAX-HPTP-SB-9	JAX-HPTP-SB-10	JAX-HPTP-SB-10	JAX-HPTP-SB-11	JAX-HPTP-SB-12	JAX-HPTP-SB-13	JAX-HPTP-SB-14	JAX-HPTP-SB-15
Date of Analysis	(mg/L)	9/29/2001	9/29/2001	9/30/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/30/2001
MTBE	50	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	40	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	30	<1	4.8	<1	<1	<1	<1	<1	<1
m&p-xylene	20	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	20	6.4	46.2	<1	3.4	<1	<1	<1	1.7
1-Methylnaphthalene	20	7.8	22.0	<1	4.1	<1	<1	<1	<1
2-Methylnaphthalene	20	6.2	22.0	<1	3.7	<1	<1	<1	<1

Notes:

¹Chapter 62-770, FAC (April 30, 1999)

Bold indicates exceedance of Groundwater Cleanup Target Levels (GCTLs).

μg/L = micrograms per liter

TABLE 6 FIXED BASED LABORATORY GROUNDWATER ANALYTICAL RESULTS

PCA 17 - HIGH POWER TURN-UP PAD NAVAL AIR STATION JACKSONVILLE JACKSONVILLE, FLORIDA

Compound	FDEP Target Level ¹	JAX-17-MW1-01	JAX-17-MW2-01	JAX-17-MW3-01	JAX-17-MW4-01	JAX-17-MW5-01
		10/24/2001	10/24/2001	10/24/2001	1/3/2002	1/3/2002
VOCs (USEPA Method 802	1B) (μg/L)					
cis 1,2 Dichloroethene	70	1U	0.82J	6.2	24.4	2.8
trans 1,2 Dichloroethene	100	1U	1U	1U	0.5J	1U
Trichloroethene	3	1U	1U	0.62J	0.81J	0.49J
Vinyl Chloride	1	1U	1U	2.3	6.7	0.84J
FL-PRO (USEPA Method 82	 270) (mg/L)					
TRPH	5	0.25U	0.27	0.726	0.25U	0.25U

Notes:

¹Chapter 62-770, FAC (August, 1999)

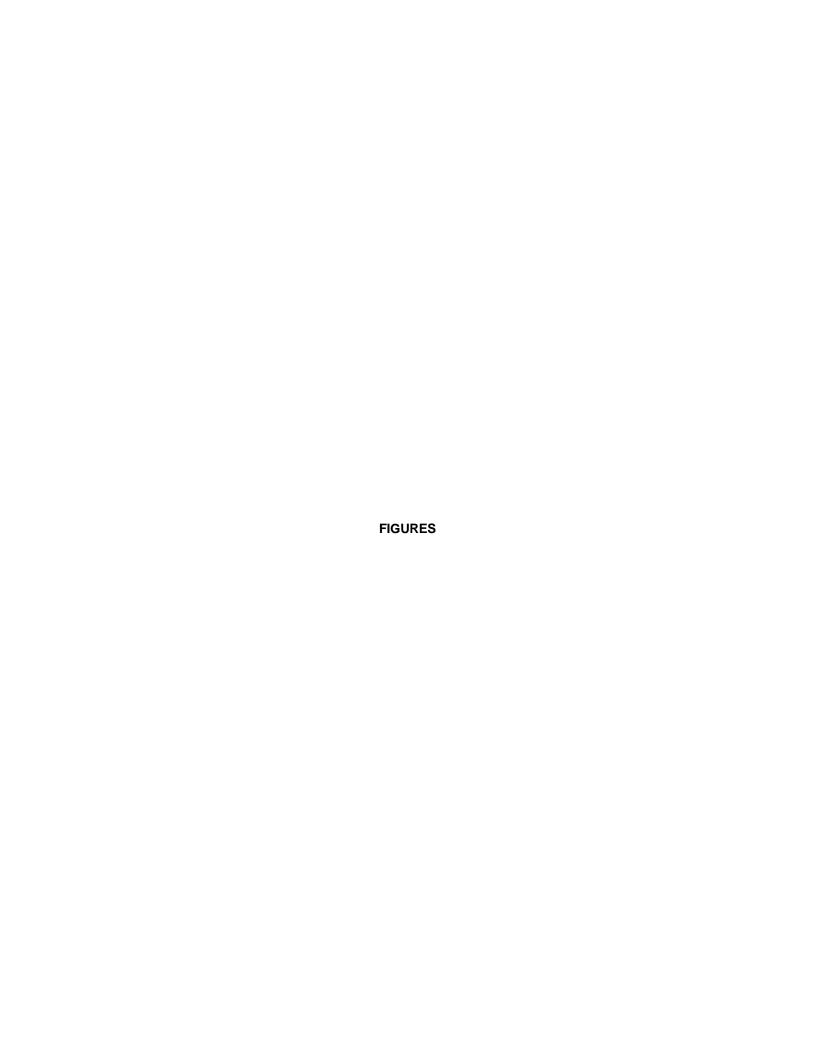
U = below method detection limit

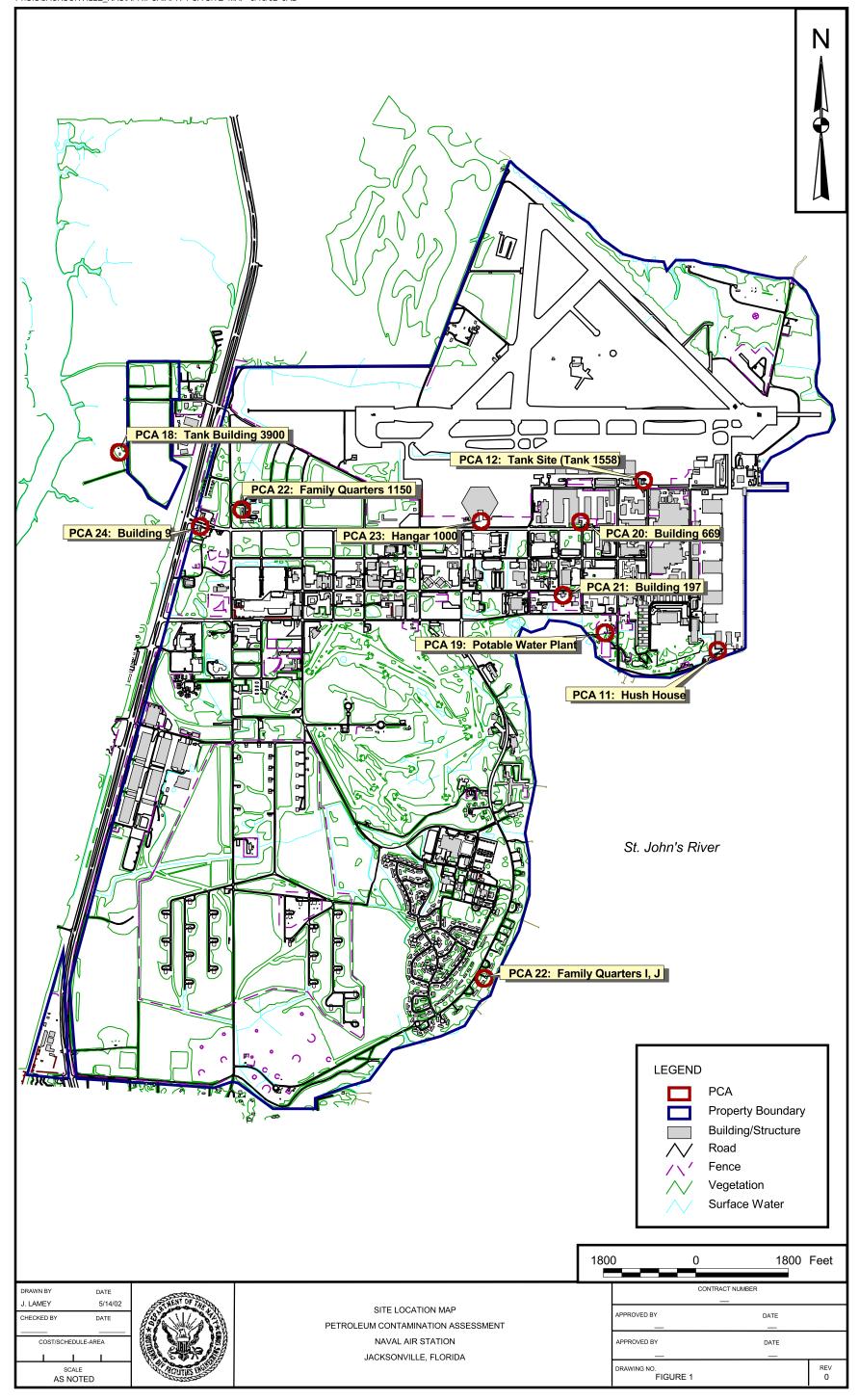
J = estimated values less than practical quantitaion leve

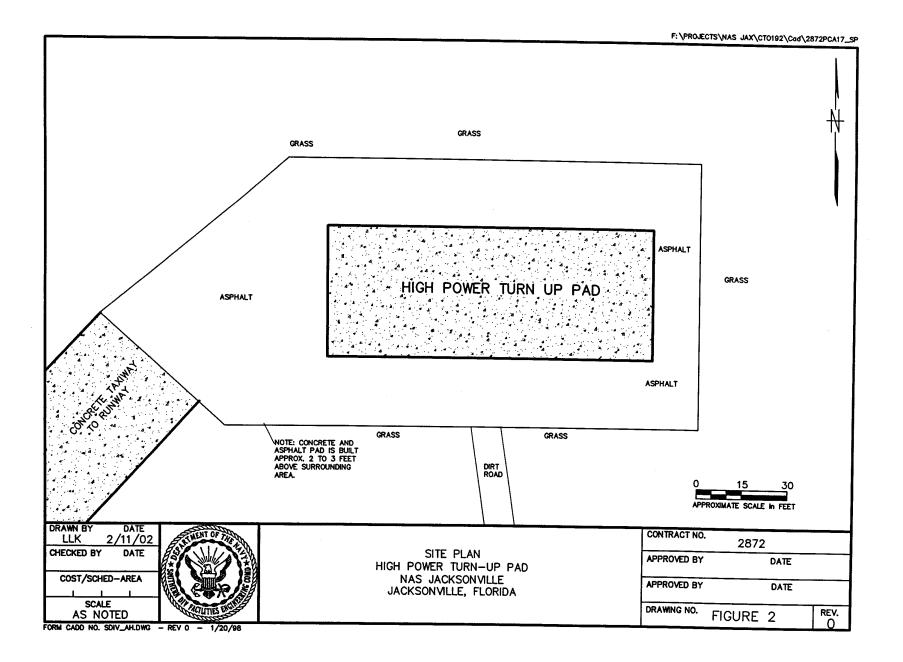
Bold indicates exceedance of target level.

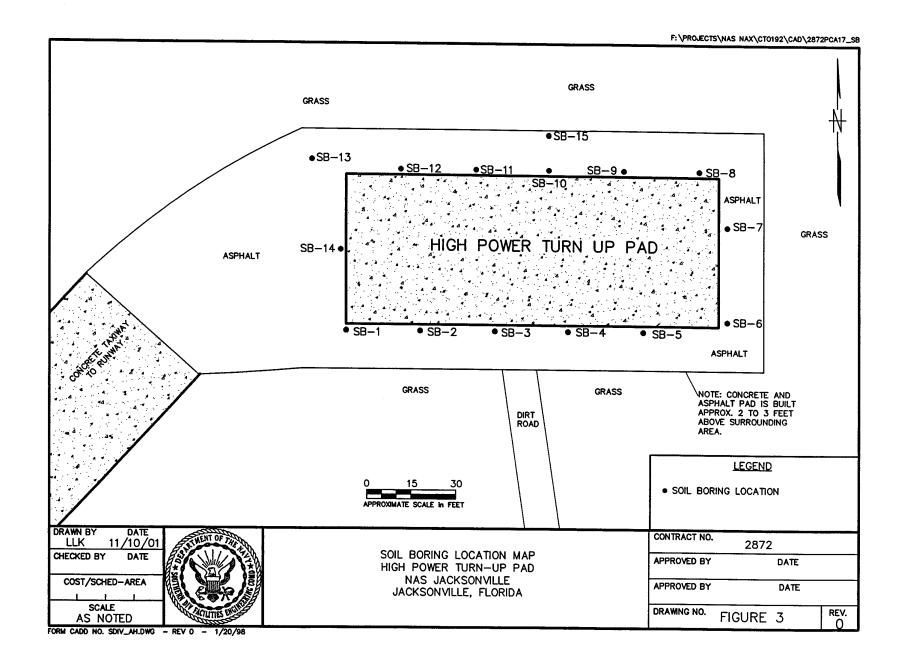
mg/L = milligrams per liter

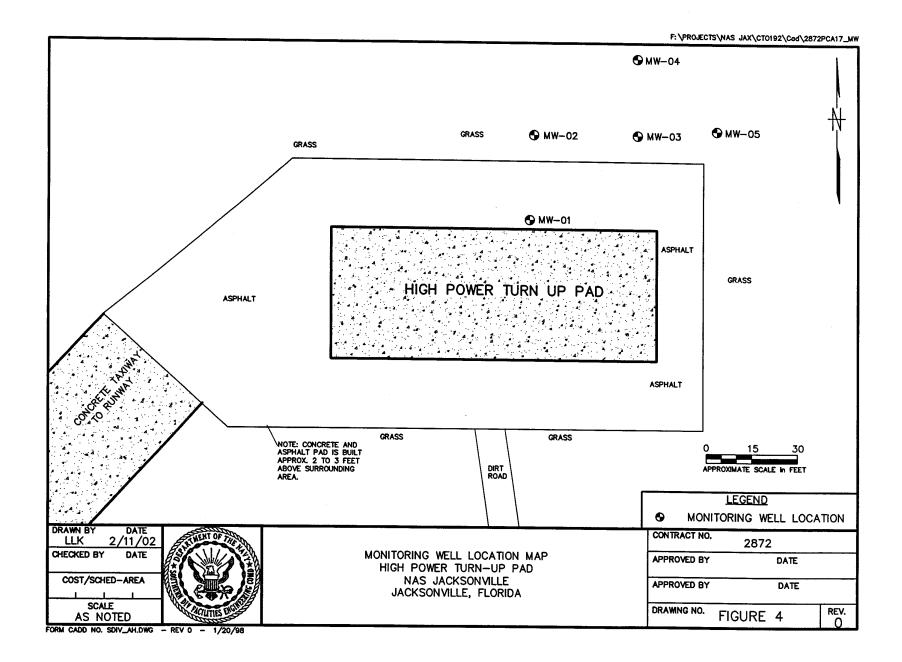
μg/L = micrograms per liter

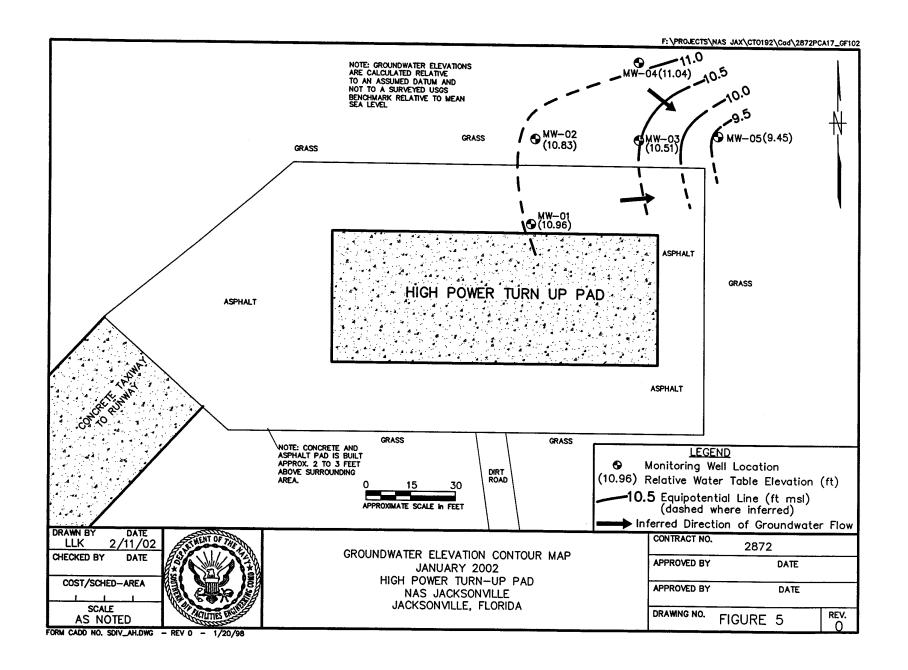


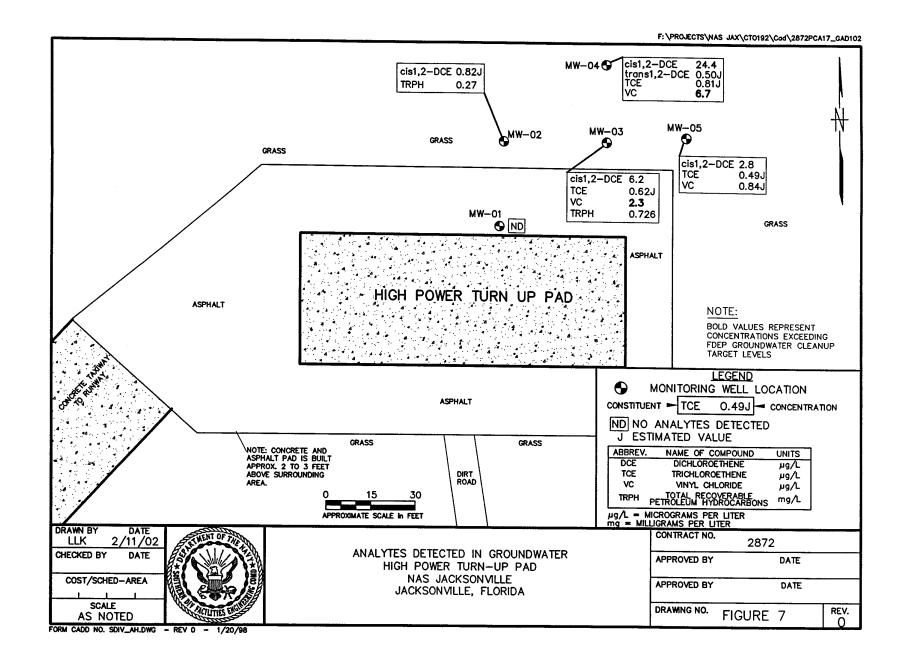












ATTACHMENT A SOIL BORING LOGS AND WELL COMPLETION LOGS



7018 AC Skinner Pkwy, Suite 250 Jacksonville, Florida 32256

Phone: (904) 281-0400

Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-1

TOTAL DEPTH: 8'

PROJECT INFORMATION

PROJECT: High Power Turn-up Pad

SITE LOCATION: NAS Jacksonville

JOB NO.: CTO 192

LOGGED BY: Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

NOTES: Low production during groundwater sample.

DRILLING INFORMATION

DRILLING COMPANY: Columbia Technologies

DRILLER: Randy

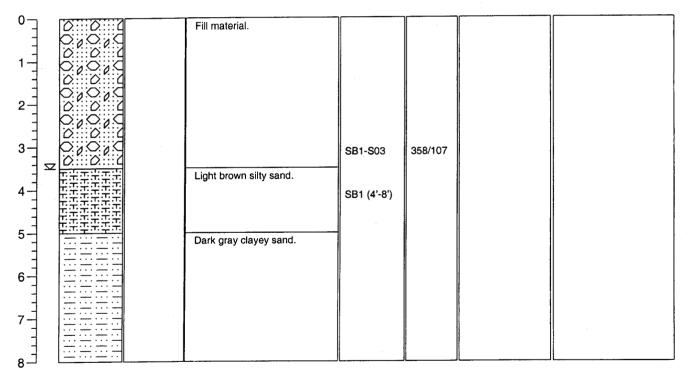
RIG TYPE: Geoprobe

DRILLING METHOD: **DPT**

SAMPLING METHOD: Core Samplers

■ Water level in completed well

DEPTH SOIL USCS SOIL DESCRIPTION	SAMP.#	FID (ppm)	WELL COMPLETION	WELL DESCRIPTION
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7018 AC Skinner Pkwy, Suite 250 Jacksonville, Florida 32256

Phone: (904) 281-0400

Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-2

TOTAL DEPTH: 10'

PROJECT INFORMATION

High Power Turn-up Pad PROJECT:

SITE LOCATION:

NAS Jacksonville

JOB NO.:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

NOTES: Gravel fill to 3', no mobile lab sample of fill.

DRILLING INFORMATION

DRILLING COMPANY: Columbia Technologies

DRILLER:

Randy

RIG TYPE:

Geoprobe

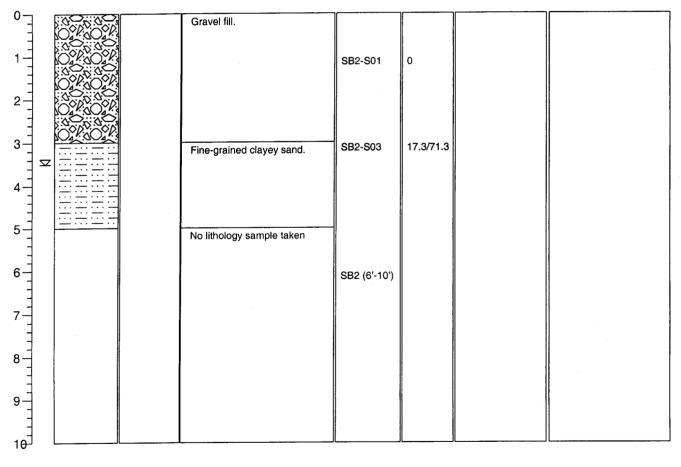
DRILLING METHOD: DPT

SAMPLING METHOD: Core Samplers

Water level during drilling

Water level in completed well

WELL WELL FID SOIL SOIL DESCRIPTION USCS SAMP.# **DEPTH** SYMBOL (ppm) DESCRIPTION COMPLETION





7018 AC Skinner Pkwy, Suite 250 Jacksonville, Florida 32256

Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-3

TOTAL DEPTH: 10'

PROJECT INFORMATION

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

PROJECT:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

9/29/0

NOTES: Gravel fill to 3', no mobile lab sample of fill.

DRILLING INFORMATION

DRILLING COMPANY: Columbia Technologies

DRILLER:

Randy

RIG TYPE:

Geoprobe

DRILLING METHOD: DPT

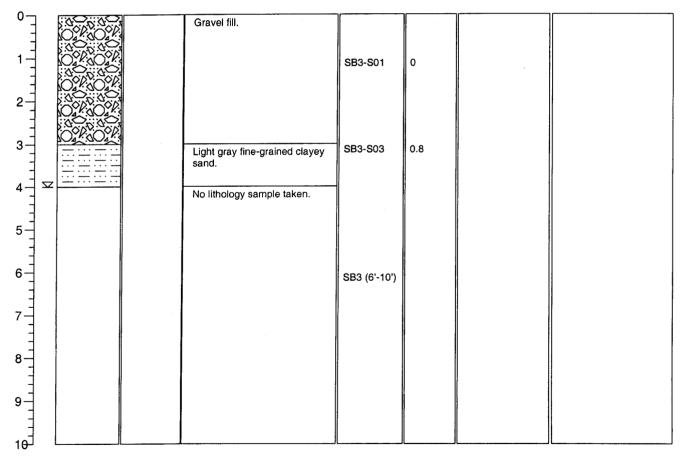
ואט

SAMPLING METHOD: Core Samplers

NOTES: Graver fill to 3, no mobile lab sample of fill.

■ Water level in completed well

DEPTH SOIL SYMBOL USCS SOIL DESCRIPTION SAMP.# FID (ppm) COMPLETION DESCRIPTION





7018 AC Skinner Pkwy, Suite 250 Jacksonville, Florida 32256

Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-4

TOTAL DEPTH: 10'

PROJECT INFORMATION

PROJECT:

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

NOTES: Gravel fill to 3', no mobile lab sample of fill.

DRILLING INFORMATION

DRILLING COMPANY: Columbia Technologies

DRILLER:

Randy

RIG TYPE:

Geoprobe

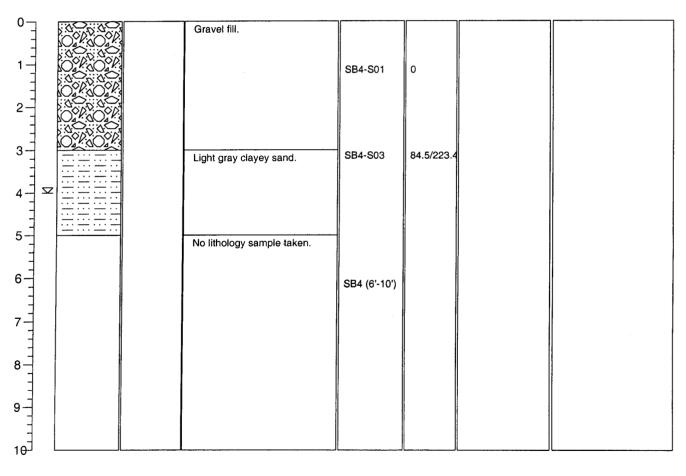
DRILLING METHOD: **DPT**

SAMPLING METHOD: Core Samplers

Water level during drilling

Water level in completed well

WELL WELL SOIL FID DEPTH USCS SOIL DESCRIPTION SAMP.# SYMBOL (ppm) DESCRIPTION COMPLETION





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Phone: (904) 281-0400

Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-5

DRILLING INFORMATION

Randy

Geoprobe

DRILLING COMPANY: Columbia Technologies

TOTAL DEPTH: 10'

PROJECT INFORMATION

PROJECT:

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO .:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

NOTES: Gravel fill to 3', no mobile lab sample of fill.

Water level during drilling

DRILLING METHOD: **DPT**

Water level in completed well ¥

SOIL DEPTH SYMBOL

SOIL DESCRIPTION USCS

SAMP.#

DRILLER:

RIG TYPE:

WELL FID (ppm) COMPLETION

SAMPLING METHOD: Core Samplers

WELL **DESCRIPTION**

0		Gravel fill.	SB5-S01	33.6/15.9		
3		Light gray clayey sand.	SB5-S03	1791/624		
5 1 1 6 1		No lithology sample taken.	SB5 (6'-10')			
7-						
9-						



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Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO .: JAX-HPTP-SB-6

DRILLING INFORMATION

Randy

Geoprobe

DRILLING COMPANY: Columbia Technologies

TOTAL DEPTH:

PROJECT INFORMATION

PROJECT: High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

SYMBOL

NOTES: Gravel fill to 3.5', no mobile lab sample of fill.

Water level during drilling

DRILLING METHOD: DPT

DRILLER:

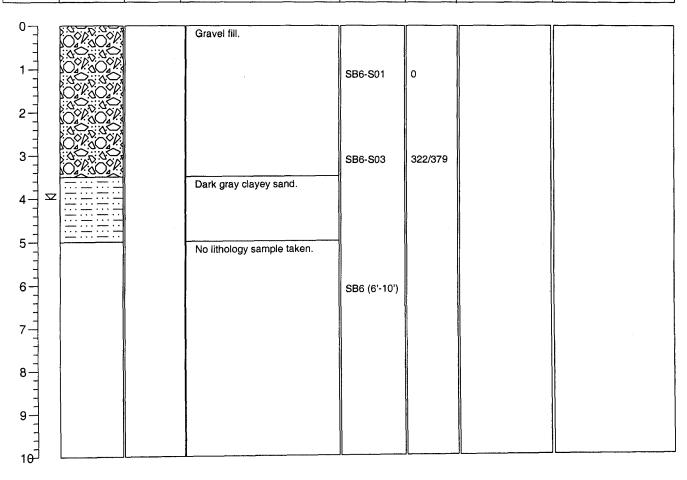
RIG TYPE:

Water level in completed well ¥

SAMPLING METHOD: Core Samplers

SOIL **DEPTH** USCS SOIL DESCRIPTION

WELL **WELL** FID SAMP.# (ppm) **DESCRIPTION** COMPLETION





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Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-7

TOTAL DEPTH: 10'

PROJECT INFORMATION

High Power Turn-up Pad

SOIL DESCRIPTION

SITE LOCATION:

SOIL

SYMBOL

NAS Jacksonville

JOB NO.:

DEPTH

PROJECT:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

NOTES: Gravel fill to 3.5', no mobile lab sample of fill.

USCS

DRILLING INFORMATION

DRILLING COMPANY: Columbia Technologies

DRILLER: Randy

Geoprobe

DRILLING METHOD: DPT

RIG TYPE:

SAMP.#

SAMPLING METHOD: Core Samplers

□ Water level during drilling

(ppm)

Water level in completed well

AND # FID WELL WELL

COMPLETION

DESCRIPTION

| Gravel fill. | SB7-S01 | 0 | SB7-S03 | 1468/1241 | SB7-S03 | 1468/1241 | SB7-S03 | S



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Phone: (904) 281-0400 Fax: (904) 281-0070

TOTAL DEPTH:

BOREHOLE NO.: JAX-HPTP-SB-8

10'

FIELD BOREHOLE LOG

DRILLING INFORMATION

Randy

Geoprobe

DRILLING COMPANY: Columbia Technologies

PROJECT INFORMATION

PROJECT: High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO .:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

SOIL

SYMBOL

DATES DRILLED:

9/29/01

DEPTH

NOTES: Gravel fill to 3.5', no mobile lab sample of fill.

Water level during drilling

DRILLING METHOD: DPT

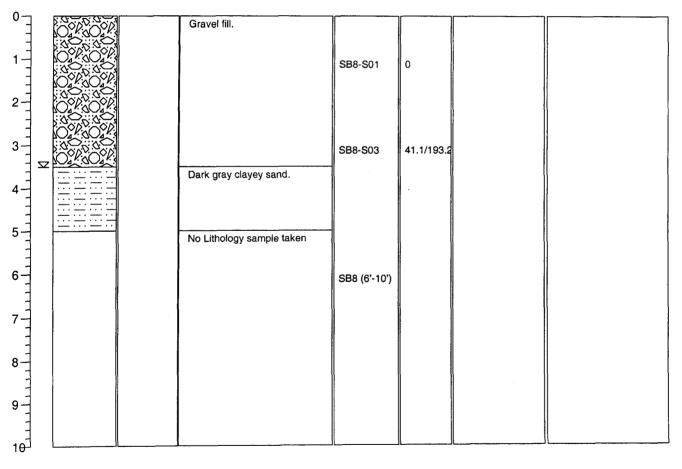
Water level in completed well

SAMPLING METHOD: Core Samplers

WELL WELL FID USCS SOIL DESCRIPTION SAMP.# (ppm) **DESCRIPTION** COMPLETION

DRILLER:

RIG TYPE:





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Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO .: JAX-HPTP-SB-9

TOTAL DEPTH: 10'

DRILLING INFORMATION PROJECT INFORMATION

High Power Turn-up Pad PROJECT:

NAS Jacksonville SITE LOCATION:

JOB NO.:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

DRILLING COMPANY: Columbia Technologies

DRILLER: Randy

RIG TYPE: Geoprobe

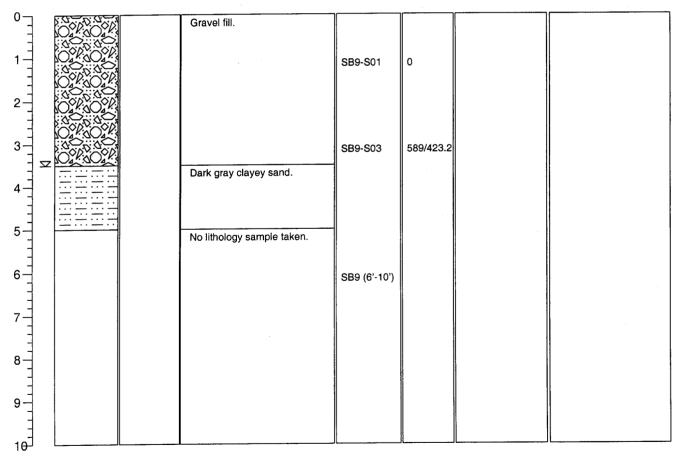
DRILLING METHOD: DPT

SAMPLING METHOD: Core Samplers

Water level during drilling NOTES: Gravel fill to 3.5', no mobile lab sample of fill.

Water level in completed well

WELL WELL FID SOIL SOIL DESCRIPTION DEPTH USCS SAMP.# SYMBOL **DESCRIPTION** (ppm) COMPLETION





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Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-10

DRILLING INFORMATION

Randy

Geoprobe

DRILLING COMPANY: Columbia Technologies

TOTAL DEPTH: 24'

PROJECT INFORMATION

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

PROJECT:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01 - 9/30/01

NOTES: Gravel fill to 3', no mobile lab sample of fill.

Water level during drilling

DRILLING METHOD: DPT

Water level in completed well

SOIL **DEPTH** SYMBOL

USCS

SOIL DESCRIPTION

SAMP.#

DRILLER:

RIG TYPE:

WELL FID (ppm) COMPLETION

SAMPLING METHOD: Core Samplers

WELL DESCRIPTION

Gravel fill. SB10-S01 81.2/0 3 SB10-S03 304.4/197 Red brown silty sand. Dark gray clayey sand. SB10 (6'-10') Coarse sand with shells. 10 Greenish gray clay, slight sands. SB10 (20'-24') Green gray clay.



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Phone: (904) 281-0400 Fax: (904) 281-0070

BOREHOLE NO.: JAX-HPTP-SB-11

FIELD BOREHOLE LOG

DRILLING INFORMATION

Randy

Geoprobe

DRILLING COMPANY: Columbia Technologies

TOTAL DEPTH: 10'

PROJECT INFORMATION

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

PROJECT:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

NOTES: Gravel fill to 3', no mobile lab sample of fill.

DRILLING METHOD: **DPT**

DRILLER:

RIG TYPE:

Water level during drilling Water level in completed well

SAMPLING METHOD: Core Samplers

SOIL USCS SOIL DESCRIPTION **DEPTH SYMBOL**

WELL FID WELL SAMP.# (ppm) COMPLETION **DESCRIPTION**

0-			·		n	16		_
~ ⊢			Gravel fill.					
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4								
]				
3-	T. (1. T. (1. T. (1.		Light brown all broad	SB11-S03	759.4/748			1
	世宗王王王王		Light brown silty sand.	0511 000	7.55.4,740			1
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j			No lithology sample taken.		}			
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4				10')				
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9-								Ì
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4								Ì
10 ⁻								
10-							-	



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Phone: (904) 281-0400

Fax: (904) 281-0070

PROJECT INFORMATION

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-12

TOTAL DEPTH: 10'

DRILLING INFORMATION

DRILLING COMPANY: Columbia Technologies

Randy

Geoprobe

PROJECT:

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

CTO 192

LOGGED BY:

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

Joe Ferranti

NOTES: Gravel fill to 3', no mobile lab sample of fill.

Water level during drilling

DRILLING METHOD: DPT

DRILLER:

RIG TYPE:

Water level in completed well

SAMPLING METHOD: Core Samplers

WELL WELL FID SOIL SOIL DESCRIPTION SAMP.# **DEPTH** USCS DESCRIPTION SYMBOL (ppm) COMPLETION :00000 10000 10000 10000 Gravel fill.

Dark gray clayey sand. SB12-S03 636.2/655 No lithology sample taken. SB12 (6'- 10')			SB12-S01	136.1/0	
SB12 (6'- 10')	3- 0.00	Dark gray clayey sand.	SB12-S03	636.2/655	
7—		No lithology sample taken.			
8-	7-		SB12 (6'- 10')		



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Phone: (904) 281-0400

Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-13

TOTAL DEPTH:

PROJECT INFORMATION

PROJECT: High Power Turn-up Pad

NAS Jacksonville

SITE LOCATION: JOB NO.:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

NOTES: Gravel fill to 3', no mobile lab sample of fill.

DRILLING COMPANY: Columbia Technologies

DRILLING INFORMATION

DRILLER:

Randy

RIG TYPE:

Geoprobe

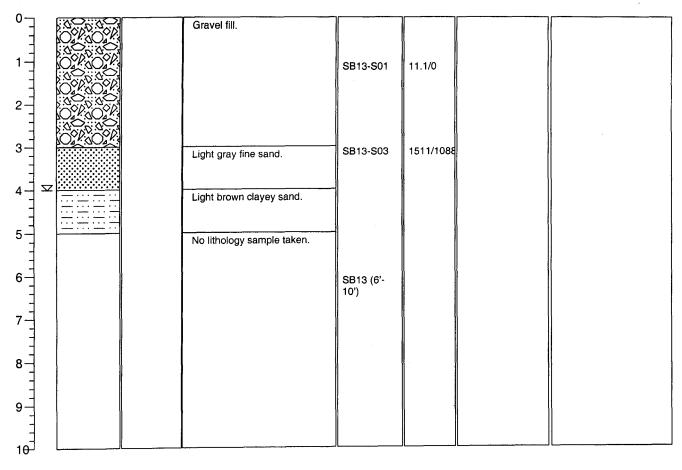
DRILLING METHOD: DPT

SAMPLING METHOD: Core Samplers

Water level during drilling

Water level in completed well •

WELL WELL SOIL FID **DEPTH** USCS SOIL DESCRIPTION SAMP.# **SYMBOL** (ppm) **DESCRIPTION** COMPLETION





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Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-14

TOTAL DEPTH: 10'

PROJECT INFORMATION

High Power Turn-up Pad PROJECT:

SITE LOCATION: **NAS Jacksonville**

JOB NO .:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/29/01

NOTES: Gravel fill to 3', no mobile lab sample of fill.

DRILLING INFORMATION

DRILLING COMPANY: Columbia Technologies

DRILLER:

Randy

RIG TYPE:

Geoprobe

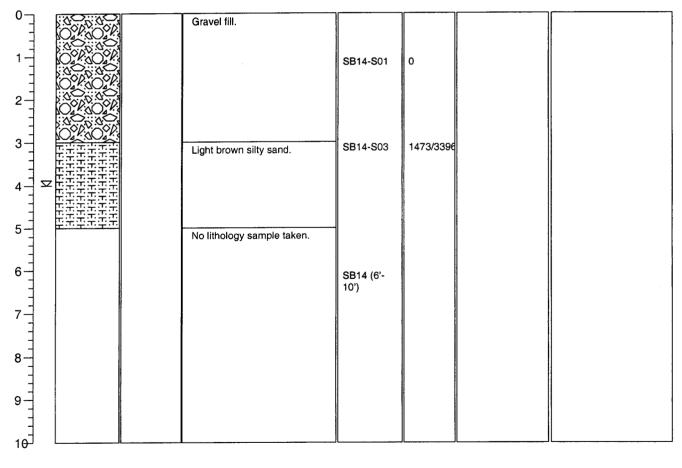
DRILLING METHOD: DPT

SAMPLING METHOD: Core Samplers

Water level during drilling

■ Water level in completed well

DEDTU	SOIL		SOIL DESCRIPTION	CANAD "	FID	WELL	WELL
DEPTH	SYMBOL	USCS	SOIL DESCRIPTION	SAMP.#	(ppm)	COMPLETION	DESCRIPTION





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Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-HPTP-SB-15

TOTAL DEPTH: 10'

PROJECT INFORMATION

PROJECT: High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

CTO 192

LOGGED BY:

Joe Ferranti

PROJECT MANAGER: Greg Roof

DATES DRILLED:

9/30/01

NOTES: Gravel fill to 3', no mobile lab sample of fill.

DRILLING INFORMATION

DRILLING COMPANY: Columbia Technologies

DRILLER:

Randy

RIG TYPE:

Geoprobe

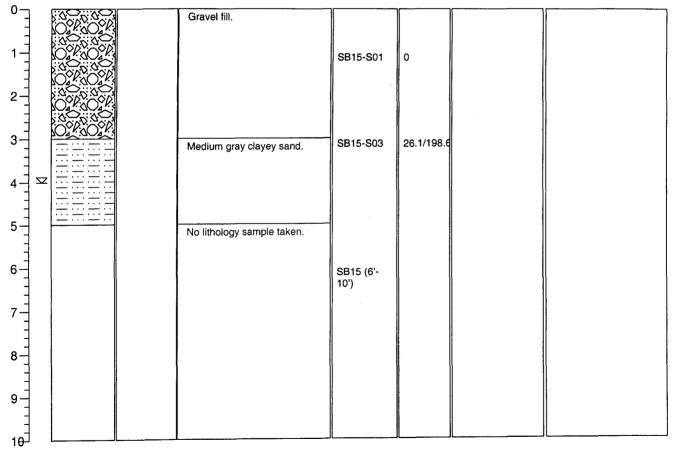
DRILLING METHOD: DPT

SAMPLING METHOD: Core Samplers

Water level during drilling

Water level in completed well

DEPTH SOIL SYMBOL USCS SOIL DESCRIPTION	SAMP.#	FID (ppm)	WELL COMPLETION	WELL DESCRIPTION
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Tetra Tech NUS, Inc.

7018 AC Skinner Pkwy, Suite 250 Jacksonville, Florida 32256

Phone: (904) 281-0400

Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-17-MW-1

TOTAL DEPTH: 13'

DRILLING INFORMATION PROJECT INFORMATION

PROJECT:

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

CTO 192

LOGGED BY:

Louis Knight

PROJECT MANAGER: Greg Roof

DATES DRILLED:

10/19/01

NOTES: Monitoring well installation

DRILLING COMPANY: ATI

DRILLER: **Lewis Johnson**

RIG TYPE:

DRILLING METHOD: HSA

SAMPLING METHOD:

Water level during drilling

Water level in completed well

WELL WELL FID SOIL SOIL DESCRIPTION SAMP.# USCS **DEPTH DESCRIPTION SYMBOL** (ppm) COMPLETION

0 1 2 3 4 5 6 7 8 9 10 11 11 11 11 11 11 11 11 11 11 11 11	Asphalt. Fill: Gravel and pale brown sand Pale, grayish-green, very fine sand. Stiff, olive-gray/green silty shelly clay.		Cement pad. Grouted annulus (Type I Portland Cement) Fine sand 2" PVC riser to 2.5' 20/30 filter sand pack 0.01 slot PVC screen
1 1 1 2 13			



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Phone: (904) 281-0400

Fax: (904) 281-0070

FIELD BOREHOLE LOG

DRILLING INFORMATION

Lewis Johnson

BOREHOLE NO.: JAX-17-MW-2

TOTAL DEPTH: 13'

PROJECT INFORMATION

PROJECT:

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

CTO 192

LOGGED BY:

Louis Knight

PROJECT MANAGER: Greg Roof

DATES DRILLED:

10/19/01

NOTES: Monitoring well installation

Water level during drilling

DRILLING COMPANY: ATI

DRILLING METHOD: HSA

SAMPLING METHOD:

Water level in completed well

SOIL DEPTH

SYMBOL

USCS

SOIL DESCRIPTION

SAMP.#

DRILLER:

RIG TYPE:

FID (ppm)

WELL COMPLETION

WELL DESCRIPTION

0= Light brown fine sand. Cement pad. Grouted annulus (Type i Portland Cement) Mottled(pale gray, orange, Fine sand brown) fine sand with some 2-2" PVC riser to 2' Blue-gray very fine sand. 3 4 20/30 filter sand pack 5 6 0.01 slot PVC screen Olive browish-green clayey silty sand. 7 9 10 11 12 13 Olive brown-green, stiff, shelly clayey silt. Gray to olive green, stiff, clay with some silt and shell.



PROJECT:

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Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-17-MW-3

TOTAL DEPTH: 13'

PROJECT INFORMATION

High Power Turn-up Pad

SITE LOCATION: NAS Jacksonville

JOB NO.: **CTO 192**

LOGGED BY: Louis Knight

PROJECT MANAGER: Greg Roof

DATES DRILLED: 10

10/19/01

NOTES: Monitoring well installation

DRILLING INFORMATION

DRILLING COMPANY: ATI

DRILLER: Le

Lewis Johnson

RIG TYPE:

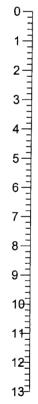
DRILLING METHOD: HSA

SAMPLING METHOD:

■ Water level in completed well

vvater rever in completed werr

DEPTH SOIL SYMBOL USCS SOIL DESCRIPTION SAMP.# FID WELL WELL DESCRIPTION



-777 -7777 -7777	Mottled(pale gray, orange, brown) fine sand with some clay.	8 8	Cement pad. Grouted annulus (Type I Portland Cement) Fine sand
	Blue-gray silty clayey sand. (Becoming light yellow brown at 5')		2" PVC riser to 2' 20/30 filter sand pack
	Pale, greenish-brown, very fine silty sand.		0.01 slot PVC screen
	Olive brown-green, gummy,		
	clayey silt.		



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Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

BOREHOLE NO.: JAX-17-MW-4

TOTAL DEPTH: 12'

PROJECT INFORMATION

High Power Turn-up Pad

SITE LOCATION:

NAS Jacksonville

JOB NO.:

PROJECT:

CTO 192

Alan Pate LOGGED BY: PROJECT MANAGER: Greg Roof

DATES DRILLED:

12/28/01

NOTES: Monitoring well installation

DRILLING INFORMATION

DRILLING COMPANY: TransAmerican

Lyle Bohn DRILLER:

Diedrich D120

DRILLING METHOD: HSA

SAMPLING METHOD:

RIG TYPE:

Water level during drilling

• Water level in completed well

SOIL WELL WELL FID **DEPTH** USCS SOIL DESCRIPTION SAMP.# SYMBOL (ppm) DESCRIPTION COMPLETION

0 -	 			
Ŭ <u>-</u>	 Light gray medium to fine			Cement pad.
	 sandy clay.		0 0	Grouted annulus (Type I
1-			∥ 片색 1색	Portland Cement)
7	 1]		Portland Cement) 30/65 fine sand seal
_ =			• •	
2			•⊟•	2" PVC riser to 2'
#				
3-∃			!	
Ŭ <u> </u>	 i		<u> </u> - -	
			' = '	
4 -	 Light brown medium to fine		' = '	20/30 filter sand pack
Ⅎ	 sandy clay.			
5 🚽	 Sandy Clay.		' = '	
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\exists				
6−	 İ			0.01 slot PVC screen
7				0.01 310(1 40 301061)
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Tetra Tech NUS, Inc.

7018 AC Skinner Pkwy, Suite 250 Jacksonville, Florida 32256

Phone: (904) 281-0400 Fax: (904) 281-0070

FIELD BOREHOLE LOG

DRILLING INFORMATION

Lyle Bohn

Diedrich D120

BOREHOLE NO.: JAX-17-MW-5

TOTAL DEPTH: 12'

DRILLING COMPANY: TransAmerican

PROJECT INFORMATION

High Power Turn-up Pad PROJECT:

SITE LOCATION:

NAS Jacksonville CTO 192 JOB NO .:

LOGGED BY:

Alan Pate

PROJECT MANAGER: Greg Roof

DATES DRILLED:

DEPTH

12/28/01

USCS

NOTES: Monitoring well installation

Water level during drilling

DRILLING METHOD: HSA

SAMPLING METHOD:

DRILLER:

RIG TYPE:

Water level in completed well

SOIL

SYMBOL

FID SOIL DESCRIPTION SAMP.#

WELL (ppm) COMPLETION

WELL DESCRIPTION

Light brown medium to fine Cement pad. sand with rocks. Grouted annulus (Type I Portland Cement) 30/65 fine sand seal 2" PVC riser to 2' 3 20/30 filter sand pack Light gray medium to fine sand with clay. 5 6 0.01 slot PVC screen Light brown medium to fine clayey sand. 7 8 9 10-Light brown thick clayey sand.

ATTACHMENT B
MOBILE LAB ANALYTICAL RESULTS

6821 Southwest Archer Road Gainesville, Florida 32608

telephone (352) 367-0073 fax (352) 367-0074 e-mail kblabs@gator.net

OCT 15

TETRA TECH NUS JACKSONVILLE FL

2001

October 11, 2001

Greg Roof Tetra Tech NUS 7018 A.C. Skinner Parkway, Suite 250 Jacksonville, FL 32256

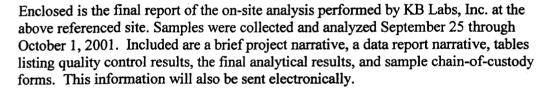
RE:

NAS Jacksonville

PSC 51 and High Power Turn-up Pad

Jacksonville, Florida

Dear Mr. Roof:



KB Labs is approved as a mobile laboratory for volatiles analyses and operates under an FDEP approved Comprehensive Quality Assurance Plan (CompQAP #980029 Revision 3). Unless otherwise stated in our CompQAP under method modifications, all data for the site referenced above were determined in accordance with published procedures under Test Methods for Evaluating Solid Waste (EPA SW-846, Update III Revised May 1997). Unless otherwise indicated on the quality control narrative accompanying the data report, the quality assurance and quality control procedures performed in conjunction with analysis of groundwater samples demonstrated that the reported data met our CompQAP requirements for accuracy and precision.

If you have any questions, please do not hesitate to call me or Todd Romero, Director of Operations, at (352) 367-0073.

Sincerely,

KB Labs, Inc.

Chris Horrell Data Specialist

> 4.8-CTO 100) Cap 47-CTO 192

PROJECT NARRATIVE

Client:	Tetra Tech NUS (TtNUS)	Driller/Sampler:	TtNUS	Analyst:	Yael Hoogland
Site:	NAS Jax	KB Labs Project Manager:	Kelly Bergdoll	KB Labs Project #:	
Onsite Dates:	09/25/01-10/01/01	Client Project Manager:	Greg Roof	Matrix:	Water and soil

Project Scope

From September 25 through October 1, 2001, a total of ninety-seven (97) water samples and fifteen (15) soil samples were collected at the Naval Air Station (NAS) in Jacksonville, FL. The samples were collected from two sites: sixteen (16) water samples and fifteen (15) soil samples were collected from the High Power Turn-up Pad site and eighty-one (81) water samples were collected from the PSC 51 site. Samples from High Power Turn-up Pad were analyzed for MTBE, benzene, toluene, ethylbenzene, xylenes, naphthalene, 1-methylnaphthalene, and 2-metylnaphthalene. Samples from PSC51 were analyzed for vinyl chloride, cis- and trans-1,2-dichloroethene, benzene, trichloroethene, toluene, ethylbenzene, xylenes and naphthalene.

Analytical Procedure

All water samples were analyzed using SW846 Method 5030/8260 for waters. Ten (10) milliliters (mL) of water were purged with helium and the volatile organic compounds (VOCs) were collected on a solid-phase adsorption trap. The adsorption trap was heated and back-purged with helium and the components were separated by capillary column gas chromatography and measured with a mass spectrometer (GC/MS) operated in the electron impact full-scan mode. The individual VOCs in the samples were measured against corresponding VOC standards.

All soil samples were analyzed using SW846 Method 5030/8260 for soils. One (1) gram (g) of soil sample was added to 10 mL of laboratory reagent water purged with helium and the volatile organic compounds (VOCs) were collected on a solid-phase adsorption trap. The adsorption trap was heated and back-purged with helium and the components were separated by capillary column gas chromatography and measured with a mass spectrometer (GC/MS) operated in the electron impact full-scan mode. The individual VOCs in the samples were measured against corresponding VOC standards.

Unless otherwise indicated, soil data is calculated based on the matrix received (i.e. wet weight basis).

Analytical Results

Laboratory results were provided to the client on an as-completed or next-day basis. Final results of the on-site analyses are provided in a hardcopy report. The data produced and reported in the field has been reviewed and approved for this final report by the Director of Operations for KB Labs.

Ouality Control (QC) Data

<u>Surrogate Recoveries</u> – Table 1 lists the daily analytical sequence and percent recovery results for surrogate compounds which were added to all analyses. Four (4) surrogate compounds were added to each analysis in order to continually monitor general method performance.

<u>Matrix Spike Recoveries</u> – Table 2 lists the percent recovery results for matrix spike samples. A known amount of each target compound was added to selected field samples and to laboratory reagent water in order to monitor the performance of each of the target compounds in the actual matrix and in laboratory reagent water.

<u>Method Blanks</u> - Daily analysis of laboratory reagent water scleanliness of the analytical system.	samples was performed in o	rder to monitor the
Signature:		
Title: Data Specialist	Date:	10/11/01

DATA REPORT NARRATIVE

Client:	Tetra Tech NUS (TtNUS)	Driller/Sampler:	TtNUS	Analyst:	Yael Hoogland
Site:	NAS Jax	KB Labs Project Manager:	Kelly Bergdoll	KB Labs Project #:	
Onsite Dates:	09/25/01 - 10/01/01	Client Project Manager:	Greg Roof	Matrix:	Water and Soil

1. Results were changed slightly due to a rounding error or significant figure:

Well ID DPT 6 10' DPT 8 10' DPT 17 10' SB7 6'-10'

Signature:	U.	1
Ū		

Title: Data Specialist

Date: 10/11/01

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS (TtNUS)

Site: NAS Jax

On-site Dates: 09/25/01-10/01/01

Driller/Sampler: TtNUS

KB Labs Proj Mngr: Kelly Bergdoll

KB Labs Project No:

Client Project Manager: Greg Roof

Matrix: Water and Soil

		% Recovery (Control Limits)				
· · · · · · · · · · · · · · · · · · ·	Date of	S1*	S2*	S3*	S4*	
Sample ID	Analysis	(80-120)	(80-120)	(80-120)	(80-120)	
vstd20	09/25/01	75	96	99	94	S1 low
vstd20	09/25/01	97	99	99	98	
blank	09/25/01	95	93	102	97	
blank	09/25/01	113	106	98	97	
DPT 6 10' 1:50	09/25/01	82	86	100	100	
DPT 7 10' 1:5	09/25/01	68	87	98	99	S1 low
DPT 8 10' 1:5	09/25/01	105	98	103	101	·
DPT 20 9'	09/25/01	110	100	103	98	
DPT 6 10' 1:5	09/25/01	107	101	101	98	
DPT 7 10'	09/25/01	79	94	103	96	S1 low
DPT 7 10' ms	09/25/01	94	104	100	95	
DPT 7 10' msd	09/25/01	94	106	99	95	·
DPT 10 30'-34'	09/25/01	104	100	97	96	rerun
DPT 10 20'-24'	09/25/01	52	67	85	98	S1,S2 low
DPT 21 6'-10'	09/25/01	37	79	94	86	S1,S2 low
DPT 10 30'-34'	09/25/01	112	99	101	96 .	
LCS	09/25/01	99	107	98	101	
CCS	09/25/01	114	106	101	101	
blank	09/25/01	128	106	104	102	S1 high
blank	09/25/01	119	102	102	100	
vstd20	09/26/01	52	82	96	99	S1 low
vstd20	09/26/01	110	97	101	102	
blank	09/26/01	110	98	101	101	1
blank	09/26/01	99	94	104	103	
DPT 21 6'-10'	09/26/01	113	105	103	99	
DPT 22 6'-10'	09/26/01	74	84	98	100	S1 low
DPT 23 6'-10'	09/26/01	116	105	103	98	
DPT 24 6'-10'	09/26/01	117	104	101	98	
DPT 16 6'-10'	09/26/01	92	95	101	101	
DPT 16 30'-34'	09/26/01	92	95	99	97	
DPT 16 20'-24'	09/26/01	123	103	105	102	S1 high
DPT 10 20'-24'	09/26/01	76	79	96	103	S1,S2 low
DPT 3	09/26/01	96	91	99	99	
DPT 16 40'	09/26/01	115	96	103	101	
MW 4	09/26/01	111	96	102	100	
DPT 19 10'	09/26/01	125	101	104	102	S1 high
DPT 17 10'	09/26/01	109	98	101	103	
DPT 19 20'	09/26/01	117	95	102	106	
DPT 19 30'	09/26/01	123	97	103	103	S1 high

S1 = 1,2- Dichloroethane-D4

S2 = 1,2-Difluorobenzene

S3 = Toluene-D8

S4 = 4-Bromofluorobenzene

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS (TtNUS) Driller/Sampler: TtNUS Analyst: Yael Hoogland KB Labs Project No: KB Labs Proj Mngr: Kelly Bergdoll Site: NAS Jax Matrix: Water and Soil On-site Dates: 09/25/01-10/01/01 Client Project Manager: Greg Roof

		% Recovery (Control Limits)				
	Date of	S1*	S2*	S3*	S4*	and the second s
Sample ID	Analysis	(80-120)	(80-120)	(80-120)	(80-120)	
DPT 19 34'	09/26/01	124	102	103	103	S1 high
MW 8	09/26/01	125	100	104	104	S1 high
MW 9	09/26/01	129	102	104	105	S1 high
MW 10	09/26/01	127	105	104	109	S1 high
MW 10 ms	09/26/01	129	110	104	111	S1 high
MW 10 msd	09/26/01	117	105	106	108	
LCS	, 09/26/01	135	106	103	104	S1 high
CCS	09/26/01	124	107	105	106	S1 high
blank	09/26/01	129	104	105	104	S1 high
blank	09/26/01	123	100	106	105	S1 high
vstd1	09/26/01	125	104	104	104	S1 high
vstd1	09/26/01	130	104	104	106	S1 high
vstd5	09/26/01	136	107	105	105	S1 high
vstd10	09/26/01	128	111	99	105	S1 high
vstd20	09/26/01	136	108	101	104	S1 high
vstd100	09/26/01	121	107	105	103	S1 high
vstd20	09/27/01	54	84	98	102	S1 low
vstd20	09/27/01	111	103	104	105	
blank	09/27/01	122	98	104	105	S1 high
blank	09/27/01	50	65	89	102	S1,S2 low
DPT 15 10'	09/27/01	105	94	102	102	
DPT 15 20'	09/27/01	89	93	97	101	
DPT 15 30'	09/27/01	119	103	98	100	
DPT 15 40'	09/27/01	131	100	100	103	S1 high
IX 51 14D	09/27/01	127	102	100	103	originally MW 140; S1 high
TX 51 13S	09/27/01	133	107	99	99	originally MW 13; S1 high
DPT 12 10'	09/27/01	131	103	100	101	S1 high
DPT 12 20'	09/27/01	134	100	100	110	S1 high
OPT 12 30'	09/27/01	133	103	99	100	S1 high
OPT 12 32'	09/27/01	131	101	99	102	S1 high
OPT 17 20'	09/27/01	131	103	100	100	S1 high
OPT 4	09/27/01	130	101	99	102	S1 high
OPT 18 20'	09/27/01	112	101	101	99	
OPT 18 10'	09/27/01	77	87	96	99	S1 low
OPT 9 10'	09/27/01	111	105	97	99	
OPT 9 39'	09/27/01	109	97	98	102	
OPT 9 30'	09/27/01	115	101	99	102	
OPT 9 20'	09/27/01	107	91	102	113	
OPT 14 10'	09/27/01	130	101	102	103	S1 high

^{*}Surrogate Compounds: S1 = 1,2- Dichloroethane-D4

S2 = 1,2-Difluorobenzene

S3 = Toluene-D8

S4 = 4-Bromofluorobenzene

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS (TtNUS)

Site: NAS Jax

On-site Dates: 09/25/01-10/01/01

Driller/Sampler: TtNUS

KB Labs Proj Mngr: Kelly Bergdoll

KB Labs Project No:

Client Project Manager: Greg Roof

Matrix: Water and Soil

		% Recovery (Control Limits)				
	Date of	S1*	S2*	S3*	S4*	
Sample ID	Analysis	(80-120)	(80-120)	(80-120)	(80-120)	
DPT 14 16'-20'	09/27/01	132	105	103	106	S1 high
DPT 11 10'	09/27/01	124	102	103	104	S1 high
DPT 11 20'	09/27/01	140	103	104	109	S1 high
DPT 13 10'	09/27/01	120	102	104	102	
DPT 11 35'	09/27/01	140	106	104	105	S1 high
MW 6	09/27/01	124	105	105	107	S1 high
MW 6 ms	09/27/01	125	106	104	107	S1 high
MW 6 msd	09/27/01	137	113	102	109	S1 high
LCS	09/27/01	128	108	104	106	S1 high
CCS	09/27/01	126	109	101	108	S1 high
blank	09/27/01	139	106	102	108	S1 high
DPT 11 30'	09/27/01	137	105	103	108	S1 high
DPT 13 20'	09/27/01	134	108	102	105	S1 high
blank	09/27/01	138	106	100	105	S1 high
vstd20	09/28/01	93	99	106	104	
vstd20	09/28/01	117	103	107	107	
blank	09/28/01	130	101	107	107	S1 high
blank	09/28/01	125	98	107	106	S1 high
DPT 13 20'	09/28/01	108	98	109	106	
DPT 11 30'	09/28/01	129	102	105	109	S1 high
DPT 5	09/28/01	129	105	106	102	S1 high
DPT 25 10'	09/28/01	143	109	104	104	S1 high
DPT 23 30'	09/28/01	132	105	105	101	S1 high
DPT 25 20'	09/28/01	135	105	103	100	S1 high
DPT 23 40'	09/28/01	126	103	104	101	S1 high
DPT 23 20'	09/28/01	135	105	104	100	S1 high
VIW 5	09/28/01	126	104	103	101	S1 high
OPT 6 20'	09/28/01	137	104	104	102	S1 high
OPT 6 30'	09/28/01	135	108	102	99	S1 high
OPT 6 39'	09/28/01	144	113	101	101	S1 high
OPT 26 6'-10'	09/28/01	104	100	96	101	
OPT 26 20'	09/28/01	98	100	99	100	
OPT 21 40'	09/28/01	106	102	99	98	
OPT 21 20'	09/28/01	94	100	99	97	
OPT 21 30'	09/28/01	118	106	100	100	
PT 24 20'	09/28/01	117	98	101	104	
OPT 24 30'	09/28/01	122	100	102	102	S1 high
PT 26 30'	09/28/01	131	98	104	106	S1 high
PT 22 20'	09/28/01	136	101	105	106	S1 high

S1 = 1,2- Dichloroethane-D4

S2 = 1,2-Difluorobenzene

S3 = Toluene-D8

S4 = 4-Bromofluorobenzene

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS (TtNUS)

Site: NAS Jax

On-site Dates: 09/25/01-10/01/01

Driller/Sampler: TtNUS

KB Labs Proj Mngr: Kelly Bergdoll

KB Labs Project No:

Client Project Manager: Greg Roof

Matrix: Water and Soil

		% Recovery (Control Limits)				
	Date of	S1*	S2*	S3*	S4*	
Sample ID	Analysis	(80-120)	(80-120)	(80-120)	(80-120)	
DPT 26 39'	09/28/01	126	103	108	104	S1 high
DPT 24 40'	09/28/01	128	101	105	103	S1 high
DPT 24 40' ms	09/28/01	124	104	106	106	S1 high
DPT 24 40' msd	09/28/01	130	108	105	106	S1 high
LCS	09/28/01	140	109	107	106	S1 high
CCS	09/28/01	124	105	106	108	S1 high
blank	09/28/01	131	102	108	106	S1 high
Surface Water	09/28/01	118	101	104	107	
blank	09/28/01	127	101	103	106	S1 high
vstd20	09/29/01	89	90	101	104	
vstd20	09/29/01	113	98	104	104	
blank	09/29/01	123	100	104	103	S1 high
blank	09/29/01	122	99	105	104	S1 high
SB1 SO3	09/29/01	52	68	99	105	S1,S2 low
SB1 4'-8'	09/29/01	170	108	100	104	S1 high
SB2 6'-10'	09/29/01	123	101	108	103	S1 high
SB2 SO3	09/29/01	131	101	104	106	S1 high
SB3 SO3	09/29/01	127	103	104	102	S1 high
SB4 SO3	09/29/01	131	105	102	102	S1 high
SB5 SO3	09/29/01	133	105	105	103	S1 high
SB6 SO3	09/29/01	136	105	106	106	S1 high
SB3 6'-10'	09/29/01	131	103	105	101	S1 high
SB4 6'-10'	09/29/01	128	103	103	103	S1 high
SB5 6'-10'	09/29/01	114	96	104	104	
SB6 6'-10'	09/29/01	125	101	107	106	S1 high
SB7 6'-10'	09/29/01	116	100	102	106	
SB8 6'-10'	09/29/01	129	105	101	106	S1 high
SB9 6'-10'	09/29/01	129	104	103	103	S1 high
SB10 6'-10'	09/29/01	125	102	102	103	S1 high
SB11 6'-10'	09/29/01	129	106	106	107	S1 high
SB12 6'-10'	09/29/01	132	102	106	107	S1 high
SB13 6'-10'	09/29/01	127	103	105	106	S1 high
SB14 SO3	09/29/01	139	104	109	109	S1 high
SB7 SO3	09/29/01	130	108	106	107	S1 high
SB8 SO3	09/29/01	131	105	105	108	S1 high
SB9 SO3	09/29/01	134	104	105	106	S1 high
SB10 SO3	09/29/01	137	105	108	109	S1 high
SB11 SO3	09/29/01	139	109	105	104	S1 high
SB12 SO3	09/29/01	134	106	107	109	S1 high

S1 = 1,2- Dichloroethane-D4

S2 = 1,2-Difluorobenzene

S3 = Toluene-D8

S4 = 4-Bromofluorobenzene

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS (TtNUS)

Site: NAS Jax

On-site Dates: 09/25/01-10/01/01

Driller/Sampler: TtNUS

KB Labs Proj Mngr: Kelly Bergdoll

KB Labs Project No:

Client Project Manager: Greg Roof

Matrix: Water and Soil

		% Recovery (Control Limits)				
	Date of	S1*	S2*	S3*	S4*	
Sample ID	Analysis	(80-120)	(80-120)	(80-120)	(80-120)	,
SB13 SO3	09/29/01	137	108	105	106	S1 high
SB14 6'-10'	09/29/01	148	114	103	106	S1 high
SB14 6'-10' ms	09/29/01	117	103	103	103	
SB14 6'-10' msd	09/29/01	128	109	105	106	S1 high
LCS	09/29/01	131	106	104	107	S1 high
CCS	09/29/01	111	100	104	107	
blank	09/29/01	133	108	105	108	S1 high
SB1 4'-8'	09/29/01	142	112	105	108	S1 high
blank	09/29/01	135	104	106	105	S1 high
vstd20	09/30/01	83	90	106	108	
vstd20	09/30/01	121	105	106	108	S1 high
blank	09/30/01	131	104	104	106	S1 high
blank	09/30/01	140	107	104	107	S1 high
SB15 6'-10'	09/30/01	47	70	93	97	S1,S2 low
SB15 SO3	09/30/01	31	48	90	103	S1,S2 low
SB15 SO3	09/30/01	64	75	95	100	S1,S2 low
SB10 20'-24' 1:10	09/30/01	155	105	102	104	S1 high
SB15 6'-10'	09/30/01	127	102	102	102	S1 high
SB15 6'-10' ms	09/30/01	127	104	102	103	S1 high
SB15 6'-10' msd	09/30/01	132	109	102	100	S1 high
LCS	09/30/01	132	111	102	105	S1 high
CCS	09/30/01	125	107	102	103	S1 high
olank	09/30/01	137	109	105	104	S1 high
SB10 20'-24'	09/30/01	156	101	102	109	S1 high
olank	09/30/01	128	107	105	104	S1 high
SB10 20'-24'	09/30/01	78	92	103	102	S1 low
vstd20	10/01/01	107	103	101	105	
std20	10/01/01	110	104	104	102	
lank	10/01/01	122	101	101	103	S1 high
olank	10/01/01	132	107	98	104	S1 high
OPT 18 30'	10/01/01	88	91	99	101	
OPT 18 40'	10/01/01	107	97	100	103	
OPT 13 30'	10/01/01	NA	NA	NA	NA	instrument error; rerun
OPT 13 39'	10/01/01	113	94	104	104	
PT 13 30'	10/01/01	128	103	99	104	S1 high
PT 13 30' ms	10/01/01	123	103	101	106	S1 high
PT 13 30' msd	10/01/01	141	109	99	104	S1 high
lank	10/01/01	125	102	103	104	S1 high
PT 7 30'	10/01/01	99	91	97	101	

S1 = 1,2- Dichloroethane-D4

S2 = 1,2-Difluorobenzene

S3 = Toluene-D8

Table 1: Analytical Run Sequence/Surrogate Percent Recoveries

Client: Tetra Tech NUS (TtNUS)	Driller/Sampler: TtNUS	Analyst: Yael Hoogland
Site: NAS Jax	KB Labs Proj Mngr: Kelly Bergdoll	KB Labs Project No:
On-site Dates: 09/25/01-10/01/01	Client Project Manager: Greg Roof	Matrix: Water and Soil

Sample ID PT 7 40' PT 8 30' PT 8 40' CS CS		% R	lecovery (Control Li		
	Date of	S1*	S2*	S3*	S4*	
Sample ID	Analysis	(80-120)	(80-120)	(80-120)	(80-120)	
DPT 7 40'	10/01/01	128	106	102	100	S1 high
DPT 8 30'	10/01/01	121	101	102	104	S1 high
DPT 8 40'	10/01/01	111	101	100	101	
LCS	10/01/01	115	105	98	103	
CCS	10/01/01	125	107	101	100	S1 high
olank	10/01/01	123	101	99	103	S1 high

Signature:

Title: Data Specialist

Date: 10 /11 /01

Table 2: VOC Spike Compound Percent Recoveries

Client: Tetra Tech NUS (TtNUS)

Driller/Sampler: TtNUS

Site: NAS Jax

KB Labs Project Manager: Kelly Bergdoll

On-site Dates: 09/25/01-10/01/01

Client Project Manager: Greg Roof

Matrix: Water and Soil

Spike Compounds *>>	VOC1	VOC2	VOC3	VOC4	VOC5	VOC6	VOC7	VOC8	V0C9	VOC10	VOC11	VOC12	
Control Limits (CL) ** >>	57-130	55-130	67-128	61-130	74-128	75-119			73-126	81-114	74-120	78-116	Comment
Warning Limits * * > >	69-118	68-117	77-118	72-118	83-119	82-111	49-137	85-108	82-117	86-108	82-113	85-110	
RPD Limit (RPDL) >>	20	20	20	20	20	20	20	20	20	20	20	20	
Station/Sample ID:				·	Per	rcent (%	Recover	ries					i i
DPT 7 ms	105	NA	NA	98	151	110	137	87	NA	70	70	74	VOC5 high; VOC10,11,12 low
DPT 7 msd	102	NA	NA	_90	115	129	115	85	NA	68	65	68	VOC6 high; VOC10,11,12 low
RPD	3			9	27	16	17	2		3	7	8	VOC5 RPD high
MW 10 ms	122	NA	NA	122	116	108	127	94	NA	97	92	90	
MW 10 msd	117	NA	NA	119	105	100	119	97	NA	99	94	92	
RPD	4			2	10	8	7	3		2	2	2	
MW 6 ms	115	NA	NA	120	104	92	85	95	NA	94	92	91	
MW 6 msd	128	NA	NA	142	128	111	99	98	NA	96	97	93	VOC4,5 high
RPD	11			17	21	19	15	3		2	5	2	VOC5 RPD high
DPT 24 40' ms	106	NA	NA	106	98	97	80	86	NA	92	87	85	
DPT 24 40' msd	110	NA	NA	112	110	103	85	91	NA	96	92	91	
RPD	4			6	12	6	6	6		4	6	7	
SB14 6'-10' ms	NA	NA	NA	NA	NA	97	NA	86	NA	93	85	83	
SB14 6'-10' msd	NA	NA	NA	NA	NA	102	NA	89	NA	96	88	86	
RPD						5		3		3	3	4	
SB15 6'-10' ms	NA	NA	NA	NA	NA	95	NA	85	NA	91	86	84	
SB15 6'-10' msd	NA	NA	NA	NA	NA	102	NA	88	NA	94	87	85	
RPD						7		3		3	1	1	
DPT 13 30' ms	145	NA	NA	134	115	115	95	101	NA	105	97	92	VOC1,4 high
DPT 13 30' msd	140	NA	NA	132	124	121	98	96	NA	101	93	91	VOC1,4,6 high
ŔPĹ) 4			2	8	5	3	5		4	4	1	

^{**} Control limits based on historical matrix spike recoveries.

* Spike Compounds	
VOC1 = Vinyl chloride	VOC7 = Trichloroethene

VOC2 = 1,1-Dichloroethene VOC8 = Toluene

VOC3 = 1,1,2-Trichloro-1,2,2-trifluoroethane VOC9 = Tetrachloroethene VOC4 = t-1,2-Dichloroethene VOC10 = Ethylbenzene

VOC4 = 1-1,2-Dichloroethene

VOC5 = c-1,2-Dichloroethene

VOC6 = Benzene

VOC10 - Ethyloetizette

VOC11 = m&p-Xylene

VOC12 = o-Xylene

Signature:

Title: Data Specialist

Date: 10 /11 /01

Final Data Report

NAS Jax High Power Turn-up Pad September 29-30, 2001

Prepared for: Tetra Tech NUS

	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample (D	Sample ID	Sample ID
Mobile Laboratory Services	SB 1 (4'-8')	SB 2 (6'-10')	SB 3 (6'-10')	SB 4 (6'-10')	SB 5 (6'-10')	SB 6 (6*-10°)	SB 7 (6'-10')	SB 8 (6'-10')	SB 9 (6'-10')	SB 10 (6'-10')	SB 10 (20'-24')
Date of Analysis:	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/30/2001
Matrix:	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Dilution Factor:	1	1	1	1	1	1	1	1	1	1	1
MTBE	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.8	<1
m&p-Xylene	<1	<1	1.1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	<1	<1	<1	<1	1.4	<1	1.0	<1	6.4	46.2	<1
1-Methylnaphthalene	<1	<1	<1	<1	<1	<1	<1	1.2	7.8	22.0	<1
2-Methylnaphthalene	<1	<1	<1	<1	<1	<1	<1	1.1	6.2	22.0	<1

Units for waters are ug/L and for soils ug/Kg.

Final Data Report

NAS Jax High Power Turn-up Pad September 29-30, 2001

Prepared for: Tetra Tech NUS

	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID				
Mobile Laboratory Services	SB 11 (6'-10')	SB 12 (6'-10')	SB 13 (6'-10')	SB 14 (6'-10')	SB 15 (6'-10')	SB 1 SO3	SB 2 SO3	SB 3 SO3	SB 4 SO3	SB 5 SO3	SB 6 SO3
Date of Analysis:	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/30/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001
Matrix:	Water	Water	Water	Water	Water	Soil	Soil	Soil	Soil	Soil	Soil
Dilution Factor:	1	1	1	1	1	1	1	1	1	1	1
MTBE	<1	<1	<1	<1	<1	<10	<10	<10	<10	<10	<10
Benzene	<1	<1	<1	<1	<1	<10	<10	<10	<10	<10	<10
Toluene	<1	<1	<1	<1	<1	<10	<10	<10	<10	<10	<10
Ethylbenzene	<1	<1	<1	<1	<1	<10	<10	<10	<10	<10	<10
m&p-Xylene	<1	<1	<1	<1	<1	<10	<10	<10	<10	<10	<10
o-Xylene	<1	<1	<1	<1	<1	<10	<10	<10	<10	<10	<10
Naphthalene	3.4	<1	<1	<1	1.7	<10	<10	<10	<10	<10	<10
1-Methylnaphthalene	4.1	<1	<1	<1	<1	<10	<10	<10	<10	<10	<10
2-Methylnaphthalene	3.7	<1	<1	<1	<1	<10	<10	<10	<10	<10	<10

Units for waters are ug/L and for soils ug/Kg.

Final Data Report

NAS Jax High Power Turn-up Pad September 29-30, 2001

Prepared for: Tetra Tech NUS

	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID
Mobile Laboratory Services	SB 7 SO3	SB 8 SO3	SB 9 SO3	SB 10 SO3	SB11 SO3	SB 12 SO3	SB 13 SO3	SB 14 SO3	SB 15 SO3		
Date of Analysis:	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/29/2001	9/30/2001		
Matrix:	Soil										
Dilution Factor:	1	1	1	1	1	1	1	1	1		
MTBE	<10	<10	<10	<10	<10	<10	<10	<10	<10		
Benzene	<10	<10	<10	<10	<10	<10	<10	<10	<10		
Toluene	<10	<10	<10	<10	<10	· <10	<10	<10	<10		
Ethylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10		
m&p-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	<10		
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	<10		
Naphthalene	<10	<10	<10	<10	<10	<10	<10	<10	<10		
1-Methylnaphthalene	<10	<10	<10	<10	<10	<10	<10	<10	<10		
2-Methylnaphthalene	<10	<10	<10	<10	<10	<10	<10	<10	<10		

Units for waters are ug/L and for soils ug/Kg.

CHAIN-OF-CUSTODY RECORD



6821 SW Archer Road Gainesville, FL 32608 TEL (352) 367-0073 FAX (352) 367-0074

Mobile Laboratory Services FAX (352) 367-	0074				
PROJECT NAME	SITE NAME & ADDRESS	O ID	ENTIFY	/ / 3/ /	PRECEDIATION
NAS JAX SAMPLERS: (Signature)	High Paver Turn Pad Was, Jax, F CONTACT PERSON	TAINE S	AMETERS ESIRED AND NO. OF NTAINERS	D W D W D D D D D D D D D D D D D D D D	PRESERVATION C Chilled H HCL Ot Other (see Remarks)
TetraTech	Greg / Jue	빌딩		/&/	
SAMPLE DATE FIELD ID. NUMBER	TIME OWN OO STATION LOCATION / NUMBER	SAMI NUMBER (VOLATILES		Lab I.D. Number
SB-1-503 9/29	8:55	5 1	13		Lab I.D. Number
SB-1 4'-8'	9:35	wa			
5B-2-503	9:49	31	- 		
58-2 6-10	10:00	wa	-+++		
SB-3 6-101	10:20	Wa	111		
58-3 503	0:02	51			
5B-U S03	10:29	51			
SB-4'6101	10:38	wa	-11-1		:
SB-5 503	10:42	5 1			
SB-5 6-10'	11:08	W) 2			
53-6503	11:31	SI			
SB-66-10	11:35	Wa			
5B-7503	11:45	31	111		!
SB-7 6-10	12:00	wa			
5B-8503	12:11	51	9		
Precleaned Containers Relinquished by: (Signature)	Date / Time Received by: (Signature)	Date	/ Time	Remarks and Observations	3
Jul In	V 09 20 001 Gold lat	09	292001		
Relinquished by: (Signature)	Date / Time Received by: (Signature)		/Time		
feel- Ear	6924 2001 Jul Ingle	(जि	1000		
Matrix Types S Soil SV	V Surface Water GW Ground Water SG Soil Gas				

6821 SW Archer Road Gainesville, FL 32608 TEL (352) 367-0073 FAX (352) 367-0074

CHAIN-OF-CUSTODY RECORD

Mobile Laboratory Services	FAX (3!	52) 367-00)74																		A Commence of the Commence of
PROJECT NAME			SITE NAM								T	SE	IDENTIF PARAMETE	Y		<u> </u>	/		1	RESERVATION	
WAS	<u> </u>	XX	High	2 P	<u>gw</u>	en T	`w^	Pod	Uas	Js	XX	CONTAINERS	AND NO. OF	D :		* The state of t) 	C Chilled H HCL Other (see Ren	parks)
SAMPLERS: (Sig			CONTACT		ASON	J.	ે				SAMPLE MATRIX	OF CO	,	(F)	The State of the S	/ ,	/ ,	/ /			
SAMPLE FIELD ID. NUMBER		DATE	TIME	COMP.	GRAB	S	TATION L	OCATION	/ NUMBE	R	SAMF	NUMBER (100	BENTLES	*						
5B86	-101	969	12:19		7	/				<u> </u>	υ l	<u>ڪ</u> ي	 	,		-	<u> </u>	/	Lab I.D	. Number	
5B9 50	3	-/ -/- -	12:41		7	•			·· <u> </u>		5	<u>حر</u> ۱		7		\dashv					
	101		13:00		7	<u> </u>					2	2	1	7					-		
	03		13:10	-	4						$\frac{\tilde{s}}{\tilde{s}}$	$\frac{}{1}$		J	\dashv						
SB106	-10		13:20	$\overline{}$	1		· · · · · · · · · · · · · · · · · · ·				U	2	1		_				-		
SB115	03		13:30	1-1	1						5	<u> </u>							+		
SB 11 6-1	10'		15B:50	D	7	/					u	<u>)</u>		/					-		
58 125	03		14:02		7						5	1		1							
58126-			14:19		7						w	2									
56 13 5	03		14:30	}	1						S	Ī		U					1		
SB 13 6	-10,	1	1446	_	4						(J)	2									
SBIHS	03		15:00		7						5	1			,						
	1-10		15:15								W	2)	-						
				-	ļ																
Precleaned Conta Relinquished by:		re)		D	ate / T	Time	Receive	d by: <i>(Signa</i>	ature)				Date / Tir	ne	Ren	narks	and (Observations			
Relinquished by:	(Signatur	re)		P	ate / 7	lime	Receive	d by: (Signa	ature) ✓	110			Date / Tir								
Wel	<u> </u>	Se.		\pm			14	all/	Dh x	10			1929	2001							
Matrix Types	S S	Soil SW	Surface V	Vater	G	W Gro	und Wate	r SG S	Soil Gas ())									٠		

CHAIN-OF-CUSTODY RECORD

TO: LABUSE ONLY



TEL (352) 367-0073 FAX (352) 367-0074

PROJECT NAME Text Nas Jay SAMPLERS: (Signature)	SITE NAME & ADDRESS		(0)					27237231	A Commence of the Commence of
Fett Nas Jay SAMPLERS: (Signature)			92 1	IDENTIFY	7	737	- John State of State		The state of the s
	High Power Turn up Pad JUAX CONTACT PERSON	ATRIX	CONTAINERS	IDENTIFY PARAMETERS DESIRED AND NO. OF CONTAINERS	/-	0 2 3	//		PRESERVATION C Chilled H HCL Ot Other (see Remarks)
TetraTech	Joe	SAMPLE MATRIX	JF CO		2 2	/ /	' / /	/	
SAMPLE DATE FIELD ID. NUMBER	TIME G BY STATION LOCATION / NUMBER	SAMF	NUMBER OF	VOLATILES	To the state of th		/		
SB 10 20-24 9/30	949	w	a			- 			Lab I.D. Number
SB 15503	10:06	5	1	1					
SB 156'40'	10:30	W	2						
		-							
		_	_						
					101	- b	1300	1	
						`			
		┼	<u> </u>						
Precleaned Containers Relinguished by: (Signature)	Date / Time Received by: (Signature)			Date / Time	Rem	arks an	d Observat	lions	
Relinquished by: (Signature)	Date / Time Received by: (Signature)			Pate / Time					

ATTACHMENT C FIXED-BASE LAB ANALYTICAL RESULTS SDG: F11075

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID:

QC_TYPE: % SOLIDS:

UNITS: FIELD DUPLICATE OF: JAX-HPTP-SB05-S03

09/30/01 F11075-3 NORMAL 1.0 % UG/KG JAX-HPTP-SB10-S03

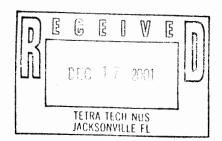
09/30/01 F11075-1 NORMAL 1.0 % UG/KG JAX-HPTP-SB11-S03

09/30/01 F11075-2 NORMAL 1.0 % UG/KG 11,

100.0 %

Page

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
BENZENE	6.9	U		6	U		5.9	U				
ETHYLBENZENE	6.9	U		6	U		5.9	U				
METHYL TERT-BUTYL ETHER	6.9	U		6 ,	U		5.9	U				
TOLUENE	6.9	U		6	U		5.9	U				
TOTAL XYLENES	21	U		18	U		18	U				



SOIL DATA Accutest, NJ SDG: F11075

est, NJ

Page

SAMPLE NUMBER: JAX-HPTP-SB05-S03 JAX-HPTP-SB10-S03 JAX-HPTP-SB11-S03 SAMPLE DATE: 09/30/01 09/30/01 09/30/01 LABORATORY ID: F11075-3 F11075-1 F11075-2 QC_TYPE: NORMAL NORMAL NORMAL % SOLIDS: 1.0 % 1.0 % 1.0 % 100.0 % UNITS: UG/KG UG/KG UG/KG

FIELD DUPLICATE OF:

										ł .		
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS											GOAL	
1-METHYLNAPHTHALENE	380	U	1	370	U	1	380	U.	1 .			1
2-METHYLNAPHTHALENE	380	U		370	U		380	U				
ACENAPHTHENE	760	Ü		740	U		760	U				
ACENAPHTHYLENE	760	U		740	U.		760	Ü	 			
ANTHRACENE	380	U		370	U		380	U		<u> </u>		-
BENZO(A)ANTHRACENE	380	U		370	Ú		380	U	1			+
BENZO(A)PYRENE	46.6	J		74	U		76	U		 		
BENZO(B)FLUORANTHENE	76	U		74	U		76	U	 		····	1
BENZO(G,H,I)PERYLENE	76	U		74	U		76	U	 	 		
BENZO(K)FLUORANTHENE	76	U		74	U		76	U		†		
CHRYSENE	380	U		370	U		380	U				
DIBENZO(A,H)ANTHRACENE	76	U		74	U		76	U				
FLUORANTHENE	380	U		370	U		380	U				1
FLUORENE	380	U		370	U		380	U				
INDENO(1,2,3-CD)PYRENE	76	U		74	U		76	U				1
NAPHTHALENE	380	U		370	U		380	U				
PHENANTHRENE	380	U		370	U		380	U				
PYRENE	380	U		370	U .		380	U		1		
												

SOIL DATA Accutest, NJ

SDG: F11075

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID: QC_TYPE:

QC_TYPE: % SOLIDS: UNITS:

FIELD DUPLICATE OF:

JAX-HPTP-SB05-S03

09/30/01 F11075-3 NORMAL 1.0 % MG/KG JAX-HPTP-SB10-S03

09/30/01 F11075-1 NORMAL 1.0 % MG/KG JAX-HPTP-SB11-S03

09/30/01 F11075-2 NORMAL 1.0 % MG/KG

100.0 %

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Page

RESULT QUAL CODE RESULT QUAL CODE RESULT QUAL CODE RESULT QUAL CODE RESULT QUAL CODE

TOTAL PETROLEUM HYDROCARBONS 44.9 9.48 9.4 U

WATER DATA Accutest, NJ

SDG: F11313

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID: QC_TYPE: % SOLIDS: UNITS:

FIELD DUPLICATE OF:

EQUIPMENT BLANK 10/24/01 F11313-1 NORMAL 0.0 % UG/L JX-HPTP-MW1-01 10/24/01 F11313-2 NORMAL 0.0 % UG/L JX-HPTP-MW2-01 10/24/01 F11313-3 NORMAL 0.0 % UG/L

JX-HPTP-MW3-01 10/24/01 F11313-4 NORMAL 0.0 % UG/L

VOLATILEO	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES		υ	1	l.		1	,		1			ı
1,1,1-TRICHLOROETHANE	1	U		1	<u>U</u>		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE	<u>'</u> 1			1	U		1	U	-	1	U	
1,1,2-TRICHLOROETHANE	<u> </u>	U		<u> </u>	U	ļ	1	U		1	U	
1,1-DICHLOROETHANE	<u>-</u>			1	U	-	1	U		1	U	
1,1-DICHLOROETHENE		U		0.00	U		1	U		1	U	
1,2-DIBROMOETHANE	0.02	U		0.02	<u>U</u>	-	0.02	U		0.02	U	
1,2-DICHLOROBENZENE	1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE	1	U		1	U	ļ	1	U	-	1	U	
1,2-DICHLOROPROPANE	11	U		1	U		1	U	ļ	1	U	
1,3-DICHLOROBENZENE	1	U		1	U	ļ	1	U		1	U	
1,4-DICHLOROBENZENE	1	U	<u>_</u>	1	U	ļ	1	U		1	U	
2-CHLOROETHYL VINYL ETHER	1	U		1	U	<u> </u>	1	U		1	U	
BENZENE	1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE	1	U		1	U		1	U		1	U	
BROMOFORM	1	U		1	U		1	U		1	U	
BROMOMETHANE	1	U		1	U		1	U		1 .	U	
CARBON TETRACHLORIDE	1	U		1	U		1	U	1	1 .	U	
CHLOROBENZENE	1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE	1	U		1	U		1	U		1	U	
CHLOROETHANE	1	U		1	U		1	U		1	U	
CHLOROFORM	1	U		1	U		1	U		1	U	
CHLOROMETHANE	1	U		1	U		1	U		1	U	
CIS-1,2-DICHLOROETHENE	1	U		1	U		0.82	J	P	6.2		
CIS-1,3-DICHLOROPROPENE	1	U		1	υ		1	U		1	U	
DICHLORODIFLUOROMETHANE	1	U	1 .	1	U		1	U		1	U	
ETHYLBENZENE	1	U		1	U		1	U		1	U	
METHYL TERT-BUTYL ETHER	1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE	5	U		5	U		5	U		5	U	
TETRACHLOROETHENE	1	U		1	U		1	U	-	1	U	
TOLUENE	1	U		1	U		1	U		1	U	
TOTAL XYLENES	3	Ū	-	3	U		3	U	T.	3	U	
TRANS-1,2-DICHLOROETHENE	1	U.		1	U	 	1	U	 	1	U	
WAV RESIDE 12/14/01	·			+	<u>-</u>		+			+		

WAV_RES.DBF

12/14/01

Page

SDG: F11313

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID: QC_TYPE: % SOLIDS: UNITS:

FIELD DUPLICATE OF:

EQUIPMENT BLANK 10/24/01 F11313-1 NORMAL 0.0 % UG/L JX-HPTP-MW1-01 10/24/01 F11313-2 NORMAL 0.0 % UG/L JX-HPTP-MW2-01 10/24/01 F11313-3 NORMAL 0.0 % UG/L JX-HPTP-MW3-01 10/24/01 F11313-4 NORMAL 0.0 % UG/L

Page

2

	RESULT	QUAL	CODERESU	LT QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES											
TRANS-1,3-DICHLOROPROPENE	1	U	1	U		1	U	1	1	U	
TRICHLOROETHENE	1	U	1	Ü.		1	U		0.62	J	Р
TRICHLOROFLUOROMETHANE	1	U	1	U		1	U		1	U	
VINYL CHLORIDE	1	U	1	U		1	U		2.3		

WAV_RES.DBF

12/14/01

WATER DATA Accutest, NJ

SDG: F11313

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID: QC_TYPE: % SOLIDS: JX-HPTP-TB-01 10/24/01 F11313-5 NORMAL 0.0 % UG/L

11

100.0 %

11

100.0 %

11

100.0 %

FIELD DUPLICATE OF:

UNITS:

	·	 										
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	<u>t</u>	U										
1,1,2,2-TETRACHLOROETHANE	11	U										†
1,1,2-TRICHLOROETHANE	1	U										
1,1-DICHLOROETHANE	1	U										
1,1-DICHLOROETHENE	1	U										1
1,2-DICHLOROBENZENE	1	U										
1,2-DICHLOROETHANE	1	U										
1,2-DICHLOROPROPANE	1	U										
1,3-DICHLOROBENZENE	1	U										1
1,4-DICHLOROBENZENE	1	U										1
2-CHLOROETHYL VINYL ETHER	1	Ų										1
BENZENE	1	U										1
BROMODICHLOROMETHANE	1	U										
BROMOFORM	1	U										1
BROMOMETHANE	1	U										
CARBON TETRACHLORIDE	1	U										
CHLOROBENZENE	1	U										
CHLORODIBROMOMETHANE	1	U										
CHLOROETHANE	1	U										
CHLOROFORM	1	U										
CHLOROMETHANE	1	U										
CIS-1,2-DICHLOROETHENE	1	U										
CIS-1,3-DICHLOROPROPENE	1	U										
DICHLORODIFLUOROMETHANE	1	U									-	
ETHYLBENZENE	1	U										
METHYL TERT-BUTYL ETHER	1	U										
METHYLENE CHLORIDE	. 5	U		1					.			
TETRACHLOROETHENE	. 1	U			· .		i —					
TOLUENE	1	U										
TOTAL XYLENES	3	Ü		1			<u> </u>			 		1
TRANS-1,2-DICHLOROETHENE	1	U		1						1		1
TRANS-1,3-DICHLOROPROPENE	1	U		<u> </u>						†		\top
WAY DEC DEE	<u>.</u>						1					

WAV_RES.DBF

12/14/01

3

Page

WATER DATA Accutest, NJ

SDG: F11313

SAMPLE NUMBER:

SAMPLE DATE:

LABORATORY ID:

JX-HPTP-TB-01

10/24/01 F11313-5 NORMAL 11

•

11

11

QC_TYPE: % SOLIDS:

UNITS: FIELD DUPLICATE OF:

0.0 % UG/L

100.0 %

100.0 %

100.0 %

Page

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
TRICHLOROETHENE	1	U										
TRICHLOROFLUOROMETHANE	1	υ										
VINYL CHLORIDE	1	U										

WATER DATA

Accutest, NJ

SDG: F11314

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID: QC_TYPE: % SOLIDS:

FIELD DUPLICATE OF:

UNITS:

EQUIPMENT BLANK 10/24/01 F11314-2 **NORMAL** 0.0 % UG/L

JX-HPTP-MW1-01 10/24/01 F11314-1 NORMAL 0.0 % UG/L

11

100.0 %

100.0 %

11

Page

CODE RESULT RESULT QUAL QUAL CODE RESULT QUAL CODE RESULT QUAL CODE POLYNUCLEAR AROMATIC HYDROCARBONS U 1-METHYLNAPHTHALENE 2.2 U 2.2 U 2 ΰ 2-METHYLNAPHTHALENE 4.4 υ U **ACENAPHTHENE** υ 4.4 U ACENAPHTHYLENE 2.2 U Ū ANTHRACENE 0.22 υ 0.2 υ BENZO(A)ANTHRACENE 0.22 υ 0.2 U BENZO(A)PYRENE 0.22 U 0.2 υ BENZO(B)FLUORANTHENE 0.22 υ 0.2 υ BENZO(G,H,I)PERYLENE 0.2 0.22 U Ü BENZO(K)FLUORANTHENE 2.2 U U CHRYSENE 0.22 υ 0.2 υ DIBENZO(A,H)ANTHRACENE U U 2.2 **FLUORANTHENE** υ U 2.2 **FLUORENE** υ 0.2 U 0.22 INDENO(1,2,3-CD)PYRENE U U 2.2 NAPHTHALENE U 2.2 U PHENANTHRENE υ 2.2 U **PYRENE**

WATER DATA

Accutest, NJ

SDG: F11313

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID:

% SOLIDS: UNITS:

QC_TYPE: FIELD DUPLICATE OF: JX-HPTP-MW2-01

10/24/01 F11313-3 NORMAL 0.0 % UG/L

JX-HPTP-MW3-01 10/24/01

F11313-4 NORMAL 0.0 % UG/L

11

100.0 %

11

100.0 %

Page

RESULT QUAL CODERESULT QUAL CODE RESULT QUAL CODE RESULT QUAL CODE POLYNUCLEAR AROMATIC HYDROCARBONS 2 U 1-METHYLNAPHTHALENE υ 2 U u 2-METHYLNAPHTHALENE 4 U **ACENAPHTHENE** U 4 υ Ū **ACENAPHTHYLENE** 2 U U ANTHRACENE U 0.2 0.2 U BENZO(A)ANTHRACENE Ū 0.2 BENZO(A)PYRENE 0.2 U U 0.2 0.2 Ū BENZO(B)FLUORANTHENE 0.2 U BENZO(G,H,I)PERYLENE 0.2 U U 0.2 0.2 Ū BENZO(K)FLUORANTHENE υ Ū 2 CHRYSENE 0.2 U 0.2 U DIBENZO(A,H)ANTHRACENE U U 2 **FLUORANTHENE** U U 2 FLUORENE Ū 0.2 U 0.2 INDENO(1,2,3-CD)PYRENE Ū υ 2 NAPHTHALENE 2 U U PHENANTHRENE Ū U 2 **PYRENE**

WATER DATA Accutest, NJ

SDG: F11314

SAMPLE NUMBER: SAMPLE DATE:

LABORATORY ID: QC_TYPE:

% SOLIDS: UNITS:

FIELD DUPLICATE OF:

EQUIPMENT BLANK

10/24/01 F11314-2 NORMAL 0.0 % MG/L JX-HPTP-MW1-01

10/24/01 F11314-1 NORMAL 0.0 %

MG/L

100.0 %

11

%

11

100.0 %

Page

	RESULT	QUAL	CODERESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	0.25	U	0.25	U				1			

TOTAL PETROLEUM HYDROCARBONS

WATER DATA Accutest, NJ

SDG: F11313

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID: QC_TYPE:

% SOLIDS: UNITS:

FIELD DUPLICATE OF:

JX-HPTP-MW2-01

10/24/01 F11313-3 NORMAL 0.0 %

MG/L

JX-HPTP-MW3-01

10/24/01 F11313-4 NORMAL 0.0 % MG/L

100.0 %

11

11

100.0 %

Page

RESULT QUAL CODERESULT QUAL CODE RESULT QUAL CODE RESULT QUAL CODE 0.27 0.726

WATER DATA Accutest, NJ

SDG: F11314

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID:

QC_TYPE: % SOLIDS: UNITS: FIELD DUPLICATE OF: **EQUIPMENT BLANK** 10/24/01 F11314-2 NORMAL 0.0 % UG/L

JX-HPTP-MW1-01 10/24/01 F11314-1 NORMAL 0.0 % UG/L

11

100.0 %

11

100.0 %

Page

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
LEAD	1.2	U		1.2	U							1
										 		

WAM_RES.DBF

12/14/01

WATER DATA Accutest, NJ

SDG: F11313

SAMPLE NUMBER:
SAMPLE DATE:
LABORATORY ID:
QC_TYPE:
% SOLIDS:
UNITS:
FIELD DUPLICATE OF:

JX-HPTP-MW2-01 10/24/01 F11313-3 NORMAL 0.0 % UG/L JX-HPTP-MW3-01 10/24/01 F11313-4 NORMAL 0.0 % UG/L

100.0 %

100.0 %

11

Page

RESULT QUAL CODE RESULT

WAM_RES.DBF

12/14/01

WATER DATA Accutest, NJ

SDG: F11944

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID:

QC_TYPE: % SOLIDS: UNITS:

FIELD DUPLICATE OF:

JAX-HPTP-MW04-01

01/03/02 F11944-2 NORMAL 0.0 % UG/L JAX-HPTP-MW05-01 01/03/02

F11944-1 NORMAL 0.0 % UG/L 11

100.0 %

11

100.0 %

Page

VOLATILES	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODI
	4		1	<u>.</u>		1	•					1
1,1,1-TRICHLOROETHANE	<u> </u>	U	 	!	U	 						
1,1,2,2-TETRACHLOROETHANE	1	U		1	U							<u> </u>
1,1,2-TRICHLOROETHANE	1	U		1	U							
1,1-DICHLOROETHANE		U		1	U							
1,1-DICHLOROETHENE	1	U	ļ	1	U							
1,2-DIBROMOETHANE	0.02	U	<u> </u>	0.02	U							
1,2-DICHLOROBENZENE	1	U		1	υ							
1,2-DICHLOROETHANE	1	U		1	U							
1,2-DICHLOROPROPANE	1	U		1	U							
1,3-DICHLOROBENZENE	1	U		1	U							
1,4-DICHLOROBENZENE	1	U		1	U							
2-CHLOROETHYL VINYL ETHER	. 1	U		1	U							1
BENZENE	1	U		1	Ų							1
BROMODICHLOROMETHANE	1	U		1	U							
BROMOFORM	1	U		1	U							+
BROMOMETHANE	1	U		1	U							1
CARBON TETRACHLORIDE	1	U		1	U				1			1
CHLOROBENZENE	1	U		1	U							1
CHLORODIBROMOMETHANE	1	U	1	1	U							
CHLOROETHANE	1	U		1	U			····				+
CHLOROFORM	1	U	 	1	U	<u> </u>			1		····	+
CHLOROMETHANE	1	U		1	U	1	 					
CIS-1,2-DICHLOROETHENE	24.4			2.8		†			·			1
CIS-1,3-DICHLOROPROPENE	1	U	 	1	U	 			+			+
DICHLORODIFLUOROMETHANE	1	U	 	1	U	+						+
ETHYLBENZENE	<u>_</u>	Ū	 	1	U	+			+			
METHYL TERT-BUTYL ETHER	<u>i</u>	Ū	 	1	Ü	 	 		+	 		+
METHYLENE CHLORIDE	5	U	-	5	U	 			+			+
TETRACHLOROETHENE	1	Ü	-	1	U	+	 		+			+
	1	U	 	 	U	+	 		-	 		+
TOLUENE TOTAL YOU FAIRS	3	υ	-	3	U	 			+	 		+
TOTAL XYLENES	0.5	U	P	3	U		ļ			ļ		

1

WATER DATA

Page

2

Accutest, NJ SDG: F11944

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID: QC_TYPE: % SOLIDS:

UNITS:

JAX-HPTP-MW04-01 01/03/02 F11944-2 NORMAL 0.0 %

UG/L

JAX-HPTP-MW05-01 01/03/02 F11944-1 NORMAL 0.0 % UG/L

100.0 %

11

100.0 %

11

FIELD DUPLICATE OF:

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
TRANS-1,3-DICHLOROPROPENE	1	U	1	1	U				1			
TRICHLOROETHENE	0.81	J	Р	0.49	J	Р						
TRICHLOROFLUOROMETHANE	1	U		1	U							
VINYL CHLORIDE	6.7			0.84	J	Р						

WATER DATA Accutest, NJ

SDG: F11944

SAMPLE NUMBER: SAMPLE DATE: LABORATORY ID: QC_TYPE: % SOLIDS: JAX-HPTP-MW04-01 01/03/02 F11944-2 NORMAL 0.0 %

UG/L

JAX-HPTP-MW05-01 01/03/02 F11944-1 NORMAL 0.0 %

UG/L

//

100.0 %

100.0 %

11

The state of the s

Page

1

FIELD DUPLICATE OF:

UNITS:

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS		<u> </u>										
1-METHYLNAPHTHALENE	2.2	U		2	U							
2-METHYLNAPHTHALENE	2.2	Ų		2	U							
ACENAPHTHENE	4.4	U		4	U							
ACENAPHTHYLENE	4.4	U		4	U							
ANTHRACENE	2.2	U		2	U							
BENZO(A)ANTHRACENE	0.22	U		0.2	υ							
BENZO(A)PYRENE	0.22	U		0.2	U							
BENZO(B)FLUORANTHENE	0.22	U		0.2	U							
BENZO(G,H,I)PERYLENE	0.22	U		0.2	U							
BENZO(K)FLUORANTHENE	0.22	U		0.2	U							
CHRYSENE	2.2	U		2	U							
DIBENZO(A,H)ANTHRACENE	0.22	U		0.2	U							
FLUORANTHENE	2.2	U		2	U							
FLUORENE	2.2	U		2	U							
INDENO(1,2,3-CD)PYRENE	0.22	U		0.2	U							
NAPHTHALENE	2.2	U		2	U							
PHENANTHRENE	2.2	υ		2	U							
PYRENE	2.2	U		2	U							

**CTO192-NAS JACKSONVILLE DE BERANDA DE LA CARRESTA DE WINTER SHOP WATER DATA $\mathfrak{B}_{A_{1}^{\prime\prime}}$ 1 Accutest, NJ Page SDG: F11944 SAMPLE NUMBER: JAX-HPTP-MW04-01 JAX-HPTP-MW05-01 SAMPLE DATE: 01/03/02 01/03/02 11 11 LABORATORY ID: F11944-2 F11944-1 QC_TYPE: NORMAL NORMAL % SOLIDS: 0.0 % 0.0 % 100.0 % 100.0 % UNITS: MG/L MG/L FIELD DUPLICATE OF: RESULT QUAL CODE RESULT QUAL CODE RESULT QUAL CODE RESULT QUAL CODE

0.25

U

0.25

U

TOTAL PETROLEUM HYDROCARBONS

WATER DATA Accutest, NJ

SDG: F11944

FIELD DUPLICATE OF:

SAMPLE NUMBER: JAX-HPTP-MW04-0

 SAMPLE DATE:
 01/03/02

 LABORATORY ID:
 F11944-2

 QC_TYPE:
 NORMAL

 QC_TYPE:
 NORMAL

 % SOLIDS:
 0.0 %

 UNITS:
 UG/L

JAX-HPTP-MW04-01 JAX-HPTP-MW05-01

01/03/02 F11944-1 NORMAL 0.0 %

0.0 % 100.0 % UG/L

11

11

Page

100.0 %

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
LEAD	1.7	U	A	1.9	U	Α .						

Page 1 of 1

Client Sample ID: JAX-HPTP-SB10-S03

Lab Sample ID: Matrix:

F11075-1 SO - Soil

Date Sampled: 09/30/01 Date Received: 10/02/01

Method:

SW846 8260B

Percent Solids: 89.9

Project:

NAS JAX- N2872-100101 CTO#0192

Prep Batch **Analytical Batch**

Run #1

File ID DF K006988.D 1

Analyzed By 10/11/01 NAF **Prep Date** n/a

n/a

VK232

Run #2

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether	ND	6.0	ug/kg
108-88-3		ND	6.0	ug/kg
100-41-4		ND	6.0	ug/kg
1330-20-7		ND	18	ug/kg
1634-04-4		ND	6.0	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		75-125%
2037-26-5	Toluene-D8	101%		75-125%
460-00-4	4-Bromofluorobenzene	116%		72-137%
17060-07-0	1,2-Dichloroethane-D4	110%		68-125%

Page 1 of 1

Client Sample ID: JAX-HPTP-SB10-S03

Lab Sample ID: Matrix: F11075-1 SO - Soil

EPA 8310 SW846 3550B

Date Sampled: 09/30/01 **Date Received:** 10/02/01

Percent Solids: 89.9

Method: Project:

NAS JAX- N2872-100101 CTO#0192

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch Run #1 EE005422.D 1 10/11/01 MRE 10/10/01 OP3946 GEE250

Run #2

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units Q
83-32-9	Acenaphthene	ND	740	ug/kg
208-96-8	Acenaphthylene	ND	740	ug/kg
120-12-7	Anthracene	ND	370	ug/kg
56-55-3	Benzo(a)anthracene	ND	370	ug/kg
50-32-8	Benzo(a)pyrene	ND	74	ug/kg
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg
218-01-9	Chrysene	ND	370	ug/kg
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg
206-44-0	Fluoranthene	ND	370	ug/kg
86-73-7	Fluorene	ND	370	ug/kg
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg
91-20-3	Naphthalene	ND	370	ug/kg
90-12-0	1-Methylnaphthalene	ND	370	ug/kg
91-57-6	2-Methylnaphthalene	ND	370	ug/kg
85-01-8	Phenanthrene	ND	370	ug/kg
129-00-0	Pyrene	ND	370	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		37-158%
92-94-4	p-Terphenyl	88%		59-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JAX-HPTP-SB10-S03

DF

1

Lab Sample ID:

F11075-1

Date Sampled: 09/30/01

Matrix:

SO - Soil

Date Received: 10/02/01

Method:

FLORIDA-PRO SW846 3550B

Project:

Percent Solids: 89.9

NAS JAX- N2872-100101 CTO#0192

Prep Batch Analytical Batch

Run #1

File ID OP17367.D Analyzed 10/08/01

Вy **Prep Date** ME 10/04/01

OP3954

GOP670

Run #2

Result

RL

Units Q

CAS No.

Compound

TPH (C8-C40)

mg/kg

CAS No.

Surrogate Recoveries

Run#1

9.48 9.2

Run# 2 Limits

84-15-1

o-Terphenyl

81%

66-130%

Page 1 of 1

Client Sample ID: JAX-HPTP-SB11-S03

Lab Sample ID:

F11075-2

Date Sampled: 09/30/01

Matrix:

SO - Soil SW846 8260B Date Received: 10/02/01

Method: Project:

NAS JAX- N2872-100101 CTO#0192

Percent Solids: 87.5

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	K006989.D	1	10/11/01	NAF	n/a	n/a	VK232
Run #2							

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether	ND	5.9	ug/kg
108-88-3		ND	5.9	ug/kg
100-41-4		ND	5.9	ug/kg
1330-20-7		ND	18	ug/kg
1634-04-4		ND	5.9	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		75-125%
2037-26-5	Toluene-D8	100%		75-125%
460-00-4	4-Bromofluorobenzene	109%		72-137%
17060-07-0	1,2-Dichloroethane-D4	108%		68-125%

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

By

MRE

Page 1 of 1

Client Sample ID: JAX-HPTP-SB11-S03

Lab Sample ID:

F11075-2

10/10/01

Date Sampled: 09/30/01

OP3946

Matrix:

SO - Soil

Date Received: 10/02/01

Method:

EPA 8310 SW846 3550B

DF

1

Percent Solids: 87.5

Project:

NAS JAX- N2872-100101 CTO#0192

Analyzed

10/11/01

Prep Date **Prep Batch Analytical Batch**

GEE250

Run #1

Run #2

Polynuclear Aromatic Hydrocarbons

EE005423.D

File ID

CAS No.	Compound	Result	RL	Units Q
83-32-9	Acenaphthene	ND	760	ug/kg
208-96-8	Acenaphthylene	ND	760	ug/kg
120-12-7	Anthracene	ND	380	ug/kg
56-55-3	Benzo(a)anthracene	ND	380	ug/kg
50-32-8	Benzo(a)pyrene	ND	76	ug/kg
205-99-2	Benzo(b)fluoranthene	ND	76	ug/kg
191-24-2	Benzo(g,h,i)perylene	ND	76	ug/kg
207-08-9	Benzo(k)fluoranthene	ND	76	ug/kg
218-01-9	Chrysene	ND	380	ug/kg
53-70-3	Dibenzo(a,h)anthracene	ND	76	ug/kg
206-44-0	Fluoranthene	ND	380	ug/kg
86-73-7	Fluorene	ND	380	ug/kg
193-39-5	Indeno(1,2,3-cd)pyrene	ND	76	ug/kg
91-20-3	Naphthalene	ND	380	ug/kg
90-12-0	1-Methylnaphthalene	ND	380	ug/kg
91-57-6	2-Methylnaphthalene	ND	380	ug/kg
85-01-8	Phenanthrene	ND	380	ug/kg
129-00-0	Pyrene	ND	380	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		37-158%
92-94-4	p-Terphenyl	95%		59-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JAX-HPTP-SB11-S03

Lab Sample ID: Matrix: F11075-2

SO - Soil

Date Sampled: 09/30/01 **Date Received:** 10/02/01

FLORIDA-PRO SW846 3550B

Date Received: 10/02/01 Percent Solids: 87.5

Method: Project:

NAS JAX- N2872-100101 CTO#0192

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch Run #1 OP17348.D 1 10/05/01 ME 10/04/01 OP3954 GOP669

Run #2

CAS No. Compound Result

TPH (C8-C40)

ND 9.4 mg/kg

RL

CAS No. Surrogate Recoveries

Run#1 Run#2 Limits

84-15-1 o

o-Terphenyl

85%

66-130%

Units Q

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JAX-HPTP-SB05-S03

Lab Sample ID:

F11075-3

Date Sampled: 09/30/01

Matrix:

SO - Soil

Date Received: 10/02/01

Method:

SW846 8260B

Percent Solids: 87.0

Project:

NAS JAX- N2872-100101 CTO#0192

File ID K006990.D Run #1

DF Analyzed 10/11/01 1

Prep Date Вy NAF n/a

Prep Batch n/a

Analytical Batch VK232

Run #2

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene Toluene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether	ND	6.9	ug/kg
108-88-3		ND	6.9	ug/kg
100-41-4		ND	6.9	ug/kg
1330-20-7		ND	21	ug/kg
1634-04-4		ND	6.9	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		75-125%
2037-26-5	Toluene-D8	100%		75-125%
460-00-4	4-Bromofluorobenzene	111%		72-137%
17060-07-0	1,2-Dichloroethane-D4	113%		68-125%

By

MRE

Client Sample ID: JAX-HPTP-SB05-S03

Lab Sample ID:

F11075-3

Date Sampled: 09/30/01

Matrix:

SO - Soil

Date Received: 10/02/01

Method:

EPA 8310 SW846 3550B

1

Percent Solids: 87.0

Project:

NAS JAX- N2872-100101 CTO#0192

10/11/01

File ID DF Analyzed

Prep Date 10/10/01

Prep Batch OP3946

Analytical Batch GEE250

Run #1 a Run #2

Polynuclear Aromatic Hydrocarbons

EE005426.D

CAS No.	Compound	Result	RL	Units Q
83-32-9	Acenaphthene	ND	760	ug/kg
208-96-8	Acenaphthylene	ND	760	ug/kg
120-12-7	Anthracene	ND	380	ug/kg
56-55-3	Benzo(a)anthracene	ND	380	ug/kg
50-32-8	Benzo(a)pyrene	46.6	76	ug/kg J
205-99-2	Benzo(b)fluoranthene	ND	76	ug/kg
191-24-2	Benzo(g,h,i)perylene	ND	7 6	ug/kg
207-08-9	Benzo(k)fluoranthene	ND	76	ug/kg
218-01-9	Chrysene	ND	380	ug/kg
53-70-3	Dibenzo(a,h)anthracene	ND	76	ug/kg
206-44-0	Fluoranthene	ND	380	ug/kg
86-73-7	Fluorene	ND	380	ug/kg
193-39-5	Indeno(1,2,3-cd)pyrene	ND	76	ug/kg
91-20-3	Naphthalene	ND	380	ug/kg
90-12-0	1-Methylnaphthalene	ND	380	ug/kg
91-57-6	2-Methylnaphthalene	ND	380	ug/kg
85-01-8	Phenanthrene	ND	380	ug/kg
129-00-0	Pyrene	ND	380	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		37-158%
92-94-4	p-Terphenyl	101%		59-149%

⁽a) All hits confirmed by spectral match using a diode array detector.

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JAX-HPTP-SB05-S03

Lab Sample ID: Matrix:

F11075-3

DF

2

SO - Soil

Date Sampled: 09/30/01 Date Received: 10/02/01

Method: Project:

FLORIDA-PRO SW846 3550B

Percent Solids: 87.0

NAS JAX- N2872-100101 CTO#0192

Prep Batch

Analytical Batch

Run #1 Run #2

Compound

OP17368.D

File ID

Result

Analyzed

10/08/01

RL

Units Q

Prep Date

10/04/01

OP3954

GOP670

CAS No.

TPH (C8-C40)

By

ME

mg/kg

Surrogate Recoveries CAS No.

19 44.9

Run#2 Limits

84-15-1

o-Terphenyl

86%

Run#1

66-130%

71	
飞	TETRA TECH NUS, INC.

CHAIN OF CUSTODY

N'2872-NUMBER 100101



PROJE	CT NO: /えもみ:	SITE NAME:	PROJEC	CT MANA	GER AND	PHONE	NUMBER			LABORATORY NAME AND CONTACT:				
SAMPL	ERS (SIC	GNATURE)	FIELD	PERATION	U≁ ONS LEA	<i>ር ዓ</i> ህዓ / DER AND	281- C PHONE N	YOU IIMBER			Acceptest Linda Williams			
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RUSH 24	TAT [] hr. []	48 hr. 🔲 72 hr. 🔲 7 day 🔲 14 day					RVATIVE			/./	/,,	//	//	
DATE 200/	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	THEO	MALYSIS Challed by the	SE- EDA	18 9 3 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	41-163				COMMENTS
09/30	1050	JAY-HPTP- SBIU-503	S.;/	6-	ij	3					$\overline{}$	/	/	
1 1 V	1100	JAX- HPTP-SBIL-SO3	1	1	4	3	1	i						ANGLZE CAG GKAG
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COMM	COMMENTS													
DISTR	IBUTION	WHITE (ACCOMPANIES SAMPLE)			YELLOW	/ (FIELD C	COPY)	,		PINK (F	FILE COP	Y)	7.	3/99 FORM NO. TINUS-001

Client Sample ID: JX-HPTP-MW1-01

Lab Sample ID:

F11314-1

AQ - Ground Water

By

Date Sampled: 10/24/01

Matrix: Method:

EPA 8310 SW846 3510C

Date Received:

10/25/01

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Prep Date **Prep Batch Analytical Batch**

Run #1

File ID DF AA009475.D 1

Analyzed 11/02/01

MRE 10/31/01 OP4104

GAA416

Run #2

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units Q
83-32-9	Acenaphthene	ND	4.0	ug/l
208-96-8	Acenaphthylene	ND	4.0	ug/l
120-12-7	Anthracene	ND	2.0	ug/l
56-55-3	Benzo(a)anthracene	ND	0.20	ug/l
50-32-8	Benzo(a)pyrene	ND	0.20	ug/l
205-99-2	Benzo(b)fluoranthene	ND	0.20	ug/l
191-24-2	Benzo(g,h,i)perylene	ND	0.20	ug/l
207-08-9	Benzo(k)fluoranthene	ND	0.20	ug/l
218-01-9	Chrysene	ND	2.0	·ug/l
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	ug/l
206-44-0	Fluoranthene	ND	2.0	ug/l
86-73-7	Fluorene	ND	2.0	ug/l
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	ug/l
91-20-3	Naphthalene	ND	2.0	ug/l
90-12-0	1-Methylnaphthalene	ND	2.0	ug/l
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l
85-01-8	Phenanthrene	ND	2.0	ug/l
129-00-0	Pyrene	ND	2.0	ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	48%		33-141%
92-94-4	p-Terphenyl	75%		31-122%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JX-HPTP-MW1-01

Lab Sample ID:

F11314-1

Date Sampled: 10/24/01

Matrix:

AQ - Ground Water

DF

1

Date Received: 10/25/01

Method:

FLORIDA-PRO SW846 3510C

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Run #1

File ID OP17961.D **Analyzed** 10/31/01

By ME **Prep Date** 10/31/01

Prep Batch OP4099

Analytical Batch GOP681

Run #2

Compound

Result

RL

Units Q

CAS No.

TPH (C8-C40)

0.25

mg/l

Surrogate Recoveries CAS No.

Run# 1

Run#2

Limits

84-15-1

o-Terphenyl

88%

ND

55-130%

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: JX-HPTP-MW1-01

Lab Sample ID:

F11314-1

AQ - Ground Water

Date Sampled: 10/24/01

Date Received: 10/25/01

Project:

Matrix:

NAS JAX- N2872 KJ0050120

Percent Solids: n/a

Metals Analysis

Analyte Result RL IDL Units DF Prep Analyzed By Method	Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By	Method
--	---------	--------	----	-----	-------	----	------	-------------	--------

1.2 U 5.0 10/26/01 10/26/01 DM SW846 6010B Lead 1.2 ug/l 1

Вy

MRE

Page 1 of 1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID:

F11314-2

Matrix: Method: AQ - Ground Water

DF

1

EPA 8310 SW846 3510C

File ID

Date Sampled: 10/24/01

Date Received: 10/25/01

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Analyzed

11/02/01

Prep Date Prep Batch

10/31/01

Analytical Batch

OP4104 **GAA416**

Run #1 Run #2

Polynuclear Aromatic Hydrocarbons

AA009476.D

CAS No.	Compound	Result	RL	Units Q
83-32-9	Acenaphthene	ND	4.4	ug/l
208-96-8	Acenaphthylene	ND	4.4	ug/l
120-12-7	Anthracene	ND	2.2	ug/l
56-55-3	Benzo(a)anthracene	ND	0.22	ug/l
50-32-8	Benzo(a)pyrene	ND	0.22	ug/l
205-99-2	Benzo(b)fluoranthene	ND	0.22	ug/l
191-24-2	Benzo(g,h,i)perylene	ND	0.22	ug/l
207-08-9	Benzo(k)fluoranthene	ND	0.22	ug/l
218-01-9	Chrysene	ND	2.2	ug/l
53-70-3	Dibenzo(a,h)anthracene	ND	0.22	ug/l
206-44-0	Fluoranthene	ND	2.2	ug/l
86-73-7	Fluorene	ND	2.2	ug/l
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	ug/l
91-20-3	Naphthalene	ND	2.2	ug/l
90-12-0	1-Methylnaphthalene	ND	2.2	ug/l
91-57 - 6	2-Methylnaphthalene	ND	2.2	ug/l
85-01-8	Phenanthrene	ND	2.2	ug/l
129-00-0	Pyrene	ND	2.2	ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	40%		33-141%
92-94-4	p-Terphenyl	83%		31-122%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID:

F11314-2

Matrix:

AQ - Ground Water

Method: Project:

FLORIDA-PRO SW846 3510C

Date Sampled: 10/24/01

Date Received: 10/25/01

Percent Solids: n/a

NAS JAX- N2872 KJ0050120

File ID **Prep Batch** DF Analyzed By Prep Date **Analytical Batch** Run #1 OP17962.D 10/31/01 ME 10/31/01

Run #2

OP4099

GOP681

Result

RL

Units Q

CAS No.

Compound

TPH (C8-C40)

ND

0.25

mg/l

CAS No.

Surrogate Recoveries

Run#1

Run# 2

Limits

84-15-1

o-Terphenyl

85%

55-130%

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID:

F11314-2 AQ - Ground Water **Date Sampled:** 10/24/01

Matrix:

Date Received: 10/25/01

Project:

NAS JAX- N2872 KJ0050120

Percent Solids: n/a

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By	Method
Lead	1.2 U	5.0	1.2	ug/l	1	10/26/01	10/26/01 DM	SW846 6010B

TŁ	TETRA TECH NUS, INC.
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CHAIN OF CUSTODY

NUMBERTX-HPTP-102401 A

PAGE ____ OF __/__

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DATE 2007	TIME		SAMPLE ID		MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	THEOR	HALL SE	A STATE OF THE PARTY OF THE PAR		8 23g.					COMMENTS
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COM	MENTS RIBUTIO	N2872 N: W	HITE (ACCOMPANIE	O / D (>		YELLOW	(FIELD C	OPY)			PINK (FILE COP	Y) 4. 7	<u> </u>	FORM	3/99 NO. TINUS-001

Page 1 of 1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID:

F11313-1

AO - Ground Water

Date Sampled: 10/24/01

Matrix: Method:

EPA 504.1 EPA 504

DF

1

Date Received: 10/25/01

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Prep Date Prep Batch OP4091

Analytical Batch GDD132

Run #1 Run #2

Compound

DD03540.D

File ID

Result

Analyzed

10/31/01

RL

Вy

SKW

Units Q

10/30/01

106-93-4

CAS No.

1,2-Dibromoethane

ND 0.020 ug/l

N = Indicates presumptive evidence of a compound

By

RA

Client Sample ID: EQUIPMENT BLANK

File ID

QR007584.D

Lab Sample ID:

F11313-1

Matrix:

AQ - Ground Water

DF

1

SW846 8021B

Date Sampled: 10/24/01 Date Received: 10/25/01

n/a

Percent Solids: n/a

Method: Project:

NAS JAX- N2872 KJ0050120

Analyzed

11/03/01

Prep Date Prep Batch

n/a

Analytical Batch GQR312

Run #1 Run #2

VOA 8021 List

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	1.0	ug/l
74-83-9	Bromomethane	ND	1.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	1.0	ug/l
124-48-1	Dibromochloromethane	ND	1.0	ug/l
75-00-3	Chloroethane	ND	1.0	ug/l
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l
67-66-3	Chloroform	ND	1.0	ug/l
74-87-3	Chloromethane	ND	1.0	ug/l
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
75-09-2	Methylene chloride	ND	5.0	ug/l
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/I
1330-20-7	Xylenes (total)	ND	3.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID:

F11313-1

Matrix: Method:

Project:

AQ - Ground Water

SW846 8021B

NAS JAX- N2872 KJ0050120

Date Sampled: 10/24/01 Date Received: 10/25/01

Percent Solids: n/a

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	80%		56-125%
352-33-0	1-Chloro-4-fluorobenzene	122%		80-120%
352-33-0	1-Chloro-4-fluorobenzene	129%		80-120%
98-08-8	aaa-Trifluorotoluene	107%		70-127%

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JX-HPTP-MW1-01

Lab Sample ID: Matrix:

F11313-2

AQ - Ground Water

Date Received: 10/25/01

Date Sampled: 10/24/01

Method:

EPA 504.1 EPA 504

1

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Prep Batch Analytical Batch

Run #1

File ID DD03541.D DF Analyzed 10/31/01

By **Prep Date** SKW 10/30/01

OP4091

GDD132

Run #2

Compound

Result

RL

Units Q

CAS No. 106-93-4

1,2-Dibromoethane

ND

0.020

ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID: JX-HPTP-MW1-01

Lab Sample ID: F11313-2

AQ - Ground Water Matrix: Method: SW846 8021B

NAS JAX- N2872 KJ0050120

Date Sampled: 10/24/01 Date Received: 10/25/01

Percent Solids: n/a

Project:

DF **Prep Date Prep Batch Analytical Batch** File ID Analyzed By QR007585.D 1 11/03/01 RAn/a n/a GQR312 Run #1

Run #2

VOA 8021 List

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	1.0	ug/l
74-83-9	Bromomethane	ND	1.0	ug/I
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	1.0	ug/l
124-48-1	Dibromochloromethane	ND	1.0	ug/l
75-00-3	Chloroethane	ND	1.0	ug/l
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l
67-66-3	Chloroform	ND	1.0	ug/l
74-87-3	Chloromethane	ND	1.0	ug/l
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
75-09-2	Methylene chloride	ND	5.0	ug/l
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/i
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylenes (total)	ND	3.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: JX-HPTP-MW1-01

Lab Sample ID: Matrix: F11313-2 AQ - Ground Water Date Sampled: 10/24/01 Date Received: 10/25/01 Percent Solids: n/a

Method: Project: SW846 8021B NAS JAX- N2872 KJ0050120

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6 352-33-0 352-33-0 98-08-8	2-Chloropropane 1-Chloro-4-fluorobenzene 1-Chloro-4-fluorobenzene aaa-Trifluorotoluene	82% 117% 125% 105%		56-125% 80-120% 80-120% 70-127%

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JX-HPTP-MW2-01

Lab Sample ID: Matrix:

F11313-3

AQ - Ground Water

Date Sampled: 10/24/01 Date Received:

10/25/01

Method:

EPA 504.1 EPA 504

DF

1

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Analytical Batch

Run #1 Run #2

DD03542.D

Result

Analyzed

10/31/01

RL

Prep Date

10/30/01

OP4091

Prep Batch

GDD132

CAS No.

Compound

File ID

Вy

SKW

Units Q

106-93-4

1,2-Dibromoethane

ND 0.020

ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

By

RA

Client Sample ID: JX-HPTP-MW2-01

Lab Sample ID:

File ID

QR007611.D

F11313-3

Matrix:

AQ - Ground Water

DF

1

Date Sampled: 10/24/01 Date Received: 10/25/01

n/a

SW846 8021B

Percent Solids: n/a

Method: Project:

NAS JAX- N2872 KJ0050120

Analyzed

11/05/01

Prep Date Prep Batch n/a

Analytical Batch GQR314

Run #1 Run #2

VOA 8021 List

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	1.0	ug/l
74-83-9	Bromomethane	ND	1.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	1.0	ug/l
124-48-1	Dibromochloromethane	ND	1.0	ug/l
75-00-3	Chloroethane	ND	1.0	ug/l
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l
67-66-3	Chloroform	ND	1.0	ug/l
74-87-3	Chloromethane	ND	1.0	ug/l
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l
156-59-2	cis-1,2-Dichloroethene	0.82	1.0	ug/l J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
75-09-2	Methylene chloride	ND	5.0	ug/l
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylenes (total)	ND	3.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: JX-HPTP-MW2-01

Lab Sample ID: F11313-3

AQ - Ground Water

Date Sampled: 10/24/01 Date Received: 10/25/01

Matrix: Method: Project:

SW846 8021B

Percent Solids: n/a

rrojeci.

NAS JAX- N2872 KJ0050120

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	96%		56-125%
352-33-0	1-Chloro-4-fluorobenzene	110%		80-120%
352-33-0	1-Chloro-4-fluorobenzene	107%		80-120%
98-08-8	aaa-Trifluorotoluene	99%		70-127%

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID: JX-HPTP-MW2-01

Lab Sample ID:

F11313-3

Matrix:

Project:

AQ - Ground Water

Method:

EPA 8310 SW846 3510C NAS JAX- N2872 KJ0050120 **Date Sampled:** 10/24/01

Date Received: 10/25/01

Percent Solids: n/a

File ID DF Analyzed By Prep Date **Prep Batch** Analytical Batch OP4104 Run #1 AA009473.D 1 11/02/01 MRE 10/31/01 GAA416 Run #2

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	\mathbf{RL}	Units Q
83-32-9	Acenaphthene	ND	4.0	ug/l
208-96-8	Acenaphthylene	ND	4.0	ug/l
120-12-7	Anthracene	ND	2.0	ug/l
56-55-3	Benzo(a)anthracene	ND	0.20	ug/l
50-32-8	Benzo(a)pyrene	ND	0.20	ug/l
205-99-2	Benzo(b)fluoranthene	ND	0.20	ug/l
191-24-2	Benzo(g,h,i)perylene	ND	0.20	ug/l
207-08-9	Benzo(k)fluoranthene	ND	0.20	ug/l
218-01-9	Chrysene	ND	2.0	ug/l
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	ug/l
206-44-0	Fluoranthene	ND	2.0	ug/l
86-73-7	Fluorene	ND	2,0	ug/l
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	ug/l
91-20-3	Naphthalene	ND	2.0	ug/l
90-12-0	1-Methylnaphthalene	ND	2.0	ug/l
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l
85-01-8	Phenanthrene	ND	2.0	ug/l
129-00-0	Pyrene	ND	2.0	ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		33-141%
92-94-4	p-Terphenyl	90%		31-122%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JX-HPTP-MW2-01

Lab Sample ID: Matrix:

F11313-3

AQ - Ground Water

DF

Date Sampled: 10/24/01

Date Received: 10/25/01

Method:

FLORIDA-PRO SW846 3510C

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Run #1

File ID OP17959.D Analyzed 10/31/01

Prep Date By ME 10/31/01

Prep Batch

Analytical Batch

Run #2

OP4099

GOP681

CAS No.

Compound

TPH (C8-C40)

Result

RL

0.25

Units Q mg/l

CAS No.

Surrogate Recoveries

0.270 Run#1

Run# 2

Limits

84-15-1

o-Terphenyl

100%

55-130%

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: JX-HPTP-MW2-01

Lab Sample ID: F11313-3

Matrix: AQ - Ground Water

Date Sampled: 10/24/01 **Date Received:** 10/25/01

Percent Solids: n/a

Project: NAS JAX- N2872 KJ0050120

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By	Method
Lead	1.2 U	5.0	1.2	ug/l	1	10/26/01	10/26/01 DM	SW846 6010B

Page 1 of 1

Client Sample ID: JX-HPTP-MW3-01

Lab Sample ID: Matrix:

F11313-4

AQ - Ground Water

Date Sampled: 10/24/01 Date Received: 10/25/01

Method:

EPA 504.1 EPA 504

DF

1

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Analytical Batch

Run #1

DD03543.D

File ID

Analyzed 10/31/01

By **Prep Date** SKW 10/30/01

Prep Batch OP4091

GDD132

Run #2

Compound

Result

Units Q RL

CAS No. 106-93-4

1,2-Dibromoethane

ND 0.020

ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID: JX-HPTP-MW3-01

Lab Sample ID: F11313-4

AQ - Ground Water

DF

Date Sampled: 10/24/01 Date Received: 10/25/01

Matrix: Method:

SW846 8021B

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Analytical Batch

File ID Analyzed By Prep Date **Prep Batch** Run #1 a QR007612.D 11/05/01 RA n/a n/a GQR314

Run #2

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	1.0	ug/l
74-83-9	Bromomethane	ND	1.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	1.0	ug/l
124-48-1	Dibromochloromethane	ND	1.0	ug/l
75-00-3	Chloroethane	ND	1.0	ug/l
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l
67-66-3	Chloroform	ND	1.0	ug/l
74-87-3	Chloromethane	ND	1.0	ug/l
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l
156-59-2	cis-1,2-Dichloroethene	6.2	1.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
75-09-2	Methylene chloride	ND	5.0 ,	ug/l
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l
79-01-6	Trichloroethene	0.62	1.0	ug/l J
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l
75-01-4	Vinyl chloride	2.3	1.0	ug/l
1330-20-7	Xylenes (total)	ND	3.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: JX-HPTP-MW3-01

Lab Sample ID:

F11313-4

Date Sampled: 10/24/01 Date Received: 10/25/01

Matrix: Method: AQ - Ground Water SW846 8021B

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

VOA 8021 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	95%		56-125%
352-33-0	1-Chloro-4-fluorobenzene	110%		80-120%
352-33-0	1-Chloro-4-fluorobenzene	108%		80-120%
98-08-8	aaa-Trifluorotoluene	99%		70-127%

(a) Confirmed by GC/MS

B = Indicates analyte found in associated method blank

By

Page 1 of 1

Client Sample ID: JX-HPTP-MW3-01

Lab Sample ID:

F11313-4

AQ - Ground Water

Date Sampled: 10/24/01 Date Received: 10/25/01

Matrix: Method:

EPA 8310 SW846 3510C

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Analytical Batch

Run #1

File ID DF AA009474.D 1

Analyzed 11/02/01

Prep Date MRE 10/31/01

Prep Batch OP4104

GAA416

Run #2

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units Q
83-32-9	Acenaphthene	ND	4.0	ug/l
208-96-8	Acenaphthylene	ND	4.0	ug/l
120-12-7	Anthracene	ND	2.0	ug/l
56-55-3	Benzo(a)anthracene	ND	0.20	ug/l
50-32-8	Benzo(a)pyrene	ND	0.20	ug/l
205-99-2	Benzo(b)fluoranthene	ND	0.20	ug/l
191-24-2	Benzo(g,h,i)perylene	ND	0.20	ug/l
207-08-9	Benzo(k)fluoranthene	ND	0.20	ug/l
218-01-9	Chrysene	ND	2.0	ug/l
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	ug/l
206-44-0	Fluoranthene	ND	2.0	ug/l
86-73-7	Fluorene	ND	2.0	ug/l
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	ug/l
91-20-3	Naphthalene	ND	2.0	ug/l
90-12-0	1-Methylnaphthalene	ND	2.0	ug/l
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l
85-01-8	Phenanthrene	ND	2.0	ug/l
129-00-0	Pyrene	ND	2.0	ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	57%		33-141%
92-94-4	p-Terphenyl	69%		31-122%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JX-HPTP-MW3-01

Lab Sample ID:

F11313-4

Matrix:

Project:

AQ - Ground Water

Method:

FLORIDA-PRO SW846 3510C

NAS JAX- N2872 KJ0050120

Date Sampled: 10/24/01 Date Received: 10/25/01

Percent Solids: n/a

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	OP17960.D	1	10/31/01	ME	10/31/01	OP4099	GOP681

Run #2

Compound CAS No.

Result

RL

Units Q

0.25

mg/l

TPH (C8-C40)

0.726 Run#1

Run# 2

Limits

84-15-1

CAS No.

o-Terphenyl

Surrogate Recoveries

102%

55-130%

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: JX-HPTP-MW3-01

Lab Sample ID: Matrix:

F11313-4

AQ - Ground Water

Date Sampled: 10/24/01 **Date Received:** 10/25/01 Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By	Method
Lead	1.2 U	5.0	1.2	ug/l	1	10/26/01	10/26/01 DM	SW846 6010B

Client Sample ID: JX-HPTP-TB-01 Lab Sample ID: F11313-5

Matrix: Method: AQ - Trip Blank Water

SW846 8021B

Date Sampled: 10/24/01

Date Received: 10/25/01 Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Prep Date File ID DF Analyzed Вy **Prep Batch Analytical Batch** 11/03/01 QR007588.D 1 RAn/a n/a GQR312 Run #1

Run #2

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	1.0	ug/l	
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: JX-HPTP-TB-01

Lab Sample ID: F11313-5

AQ - Trip Blank Water

Date Sampled: 10/24/01

Date Received: 10/25/01

Matrix: Method:

SW846 8021B

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
75-29-6	2-Chloropropane	81%		56-125%
352-33-0	1-Chloro-4-fluorobenzene	116%		80-120%
352-33-0	1-Chloro-4-fluorobenzene	133%		80-120%
98-08-8	aaa-Trifluorotoluene	107%		70-127%

CHAIN OF CUSTODY

NUMBER JX - HPTP - 102401B | PAGE __ OF __

PROJECT NO: SITE NAME:	PROJE	CT MAN	AGER AN	DPHONE	NUMBER								_
NOBIA HPTI-	62	56		FHONE	SOLL	701				Y NAME A		ACT:	,
SAMPLERS (SIGNATURE)	FIELD (PERAT	ONS LEA	DER AND	904-	UMBER	-070	<u> </u>	CUT	EST	LI	NDA	WILLIAMS
	1 A	ر سے را	M		المحت			1 .	_	,			_ 1
E. MINI	CARRIE	R/WAY	M	BER	100			- 2	405	VI	NEC	-AND	BOC15
·	FE	DE		X20	720	274	ء رسرہ	- "					
•				CONT	INER TYP	<i>)/ / (</i>	010		JZLI	MOZ	1,12		
STANDARD TAT				PLAST	IC (P) or G	LASS (G)	_ /	6/	6/	6/6	/マ		
RUSH TAT					RVATIVE		/40	4 / 31	V/.	14	.03	<i></i>	
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐] 14 day			USED			× co	HON	W/	Pon A	NO3		
100E R	×	(<u>0</u> (2)	F CONTAINERS	THEO	MANY SE	100 Jour	8 40 A	STORE STORES	A. A.	5			
TIME SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF	RR	* SPH	100	NO PO	WAT					COMMENTS
104 1035 BOUTPMEN-BO		_			/ 		(V	/ V_			<u>/</u>	/	OMMENTO
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1024 1200 JX. HPTP. MWI-	01 6	<u>C</u>	6			X	X						
INCA1450 JX. HOTP. MWZ.	-016	6	11	×	×	~	\	~					
10/24/1625 TX. 14PTID.MN3	1-016	7	11	X			×						
JX. HPTP. TB.			Z										
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2. RELINQUISHED BY	DATE	401	/ZE			axid	DNU	194			10-	25-01	10:00
			IIIVIE		2. REĆEIVI	ED RA					DATI		TIME
3. RELINQUISHED BY	DATE		TIME	;	3. RECEIVE	D BY					DATI	Ξ ;	TIME
COMMENTS AL 2873	7 /7 6:												
DISTRIBUTION: WHITE (ACCOMPANIES S.	AMPLE)	·	YELLOW	(FIELD C	OPY)			PINK /E	LE COPY	`		~	
					.,			11417 (F)		,			3/99

Client Sample ID:	JAX-HPTP-MW04-01			
	F11944-2	Date Sampled:	01/03/02	
Matrix:	AQ - Ground Water	Date Received:	01/04/02	
Method:	SW846 8021B	Percent Solids:	n/a	
I				

NAS JAX- N2872 KJ0050120 Project:

								_
Run #1 a	File ID QR008096.D	DF 1	Analyzed 01/10/02	By RA	Prep Date n/a	Prep Batch n/a	Analytical Batch GQR347	
Run #2								

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	1.0	ug/l
74-83-9	Bromomethane	ND	1.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	1.0	ug/l
124-48-1	Dibromochloromethane	ND	1.0	ug/l
75-00-3	Chloroethane	ND	1.0	ug/l
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l
67-66-3	Chloroform	ND	1.0	ug/l
74-87-3	Chloromethane	ND	1.0	ug/l
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l
156-59-2	cis-1,2-Dichloroethene	24.4	1.0	ug/l
156-60-5	trans-1,2-Dichloroethene	0.50	1.0	ug/l J
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
75-09-2	Methylene chloride	ND	5.0	ug/l
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l
79-01-6	Trichloroethene	0.81	1.0	ug/l J
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l
75-01-4	Vinyl chloride	6.7	1.0	ug/l
1330-20-7	Xylenes (total)	ND	3.0	ug/l

 $ND = Not \ detected$

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $J = Indicates \ an \ estimated \ value$

 $B = Indicates \ analyte \ found \ in \ associated \ method \ blank$

Ву

MRE

Client Sample ID: JAX-HPTP-MW04-01

Lab Sample ID: Matrix:

F11944-2

AQ - Ground Water EPA 8310 SW846 3510C

DF

1

Date Sampled: 01/03/02 Date Received: 01/04/02

Method: Project:

Percent Solids: n/a

NAS JAX- N2872 KJ0050120

Analyzed

01/09/02

Prep Date Prep Batch 01/07/02 OP4480

Analytical Batch **GEE316**

Run #1 Run #2

Polynuclear Aromatic Hydrocarbons

EE006952.D

File ID

CAS No.	Compound	Result	RL	Units Q
83-32-9	Acenaphthene	ND	4.4	ug/l
208-96-8	Acenaphthylene	ND	4.4	ug/l
120-12-7	Anthracene	ND	2.2	ug/l
56-55-3	Benzo(a)anthracene	ND	0.22	ug/l
50-32-8	Benzo(a)pyrene	ND	0.22	ug/l
205-99-2	Benzo(b)fluoranthene	ND	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.22	ug/l
207-08-9	Benzo(k)fluoranthene	ND	0.22	ug/l
218-01-9	Chrysene	ND	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND 0.22		ug/l
206-44-0	Fluoranthene	ND 2.2		ug/l
86-73-7	Fluorene	ND	2.2	ug/l
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.22	ug/l
91-20-3	Naphthalene	ND	2.2	ug/l
90-12-0	1-Methylnaphthalene	ND	2.2	ug/l
91-57-6	2-Methylnaphthalene	ND	2.2	ug/l
85-01-8	Phenanthrene	ND	2.2	ug/l
129-00-0	Pyrene	ND	2.2	ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		33-141%
92-94-4	p-Terphenyl	87%	31-122%	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JAX-HPTP-MW04-01

Lab Sample ID:

F11944-2

Matrix:

AQ - Ground Water

Date Sampled: 01/03/02 Date Received: 01/04/02

Method:

EPA 504.1 EPA 504

DF

1

OP4481

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Prep Date Prep Batch

Analytical Batch

Run #1 Run #2

File ID

Result

RL

Ву

SKW

GDD170

CAS No.

Compound

DD04579.D

Units Q

01/07/02

106-93-4

1,2-Dibromoethane

ND

Analyzed

01/07/02

0.020 ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Samp Lab Samp Matrix: Method: Project:	ole ID: F1194 AQ - FLOF	Ground Wa RIDA-PRO			Date Sampled: 01/03/02 Date Received: 01/04/02 Percent Solids: n/a			
Run #1 Run #2	File ID OP19178.D	DF 1	Analyzed 01/08/02	By SKW	Prep Date 01/07/02	Prep Batch OP4483	Analytical Batch GOP716	
CAS No.	Compound		Result	RL	Units Q			
	TPH (C8-C40)		ND	0.25	mg/l			
CAS No.	Surrogate Re	ecoveries	Run# 1	Run# 2	Limits			
84-15-1	o-Terphenyl		106%		55-130%			

RL = Reporting Limit

 $E = Indicates \ value \ exceeds \ calibration \ range$

 $[\]begin{split} J &= \text{Indicates an estimated value} \\ B &= \text{Indicates analyte found in associated method blank} \end{split}$ $N = Indicates \ presumptive \ evidence \ of \ a \ compound$

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: JAX-HPTP-MW04-01

Lab Sample ID: F11944-2

Matrix:

Date Sampled: 01/03/02 Date Received: 01/04/02

AQ - Ground Water

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Metals Analysis

Result RLIDL DF Analyzed By Method Prep Method Analyte Units Prep

1.7 B 5.0 1.2 01/09/02 01/09/02 DM Lead ug/l SW846 6010B SW846 3010A Client Sample ID: JAX-HPTP-MW05-01

F11944-1 Lab Sample ID:

Date Sampled: 01/03/02 Matrix: AQ - Ground Water Date Received: 01/04/02 SW846 8021B Method: Percent Solids: n/a

NAS JAX- N2872 KJ0050120 Project:

File ID DF Analyzed Prep Date Analytical Batch Ву Prep Batch Run #1 a QR008095.D 01/10/02 RA 1 n/a n/a GQR347 Run #2

CAS No.	Compound	Result	RL	Units Q
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	1.0	ug/l
74-83-9	Bromomethane	ND	1.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	1.0	ug/l
124-48-1	Dibromochloromethane	ND	1.0	ug/l
75-00-3	Chloroethane	ND	1.0	ug/l
110-75-8	2-Chloroethylvinyl ether	ND	1.0	ug/l
67-66-3	Chloroform	ND	1.0	ug/l
74-87-3	Chloromethane	ND	1.0	ug/l
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l
75-71-8	Dichlorodifluoromethane	ND	1.0	ug/l
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l
156-59-2	cis-1,2-Dichloroethene	2.8	1.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
75-09-2	Methylene chloride	ND	5.0	ug/l
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l
79-01-6	Trichloroethene	0.49	1.0	ug/l J
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l
75-01-4	Vinyl chloride	0.84	1.0	ug/l J
1330-20-7	Xylenes (total)	ND	3.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

By

MRE

Client Sample ID:	JAX-HPTP-MW05-01
I - 1 C 1 ID.	E11044 1

Lab Sample ID: Matrix:

F11944-1

AQ - Ground Water

DF

1

Date Sampled: 01/03/02 Date Received: 01/04/02

Method:

EPA 8310 SW846 3510C

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Analyzed

01/08/02

Prep Date Prep Batch 01/07/02 OP4480

Analytical Batch GEE316

Run #1 Run #2

Polynuclear Aromatic Hydrocarbons

EE006949.D

File ID

CAS No.	Compound	Result	RL	Units Q		
83-32-9	Acenaphthene	ND	4.0	ug/l		
208-96-8	Acenaphthylene	ND	4.0	ug/l		
120-12-7	Anthracene	ND	2.0	ug/l		
56-55-3	Benzo(a)anthracene	ND	0.20	ug/l		
50-32-8	Benzo(a)pyrene	ND	0.20	ug/l		
205-99-2	Benzo(b)fluoranthene	ND	0.20	ug/l		
191-24-2	Benzo(g,h,i)perylene	ND	0.20	ug/l		
207-08-9	Benzo(k)fluoranthene	ND	0.20	ug/l		
218-01-9	Chrysene	ND 2.0		ug/l		
53-70-3	Dibenzo(a,h)anthracene	ND	0.20	ug/l		
206-44-0	Fluoranthene	ND	2.0	ug/l		
86-73-7	Fluorene	ND	2.0	ug/l		
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.20	ug/l		
91-20-3	Naphthalene	ND	2.0	ug/l		
90-12-0	1-Methylnaphthalene	ND	2.0	ug/l		
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l		
85-01-8	Phenanthrene	ND	2.0	ug/l		
129-00-0	Pyrene	ND	2.0	ug/l		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		33-141%		
92-94-4	p-Terphenyl	91%		31-122%		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample ID: JAX-HPTP-MW05-01

Lab Sample ID: F11944-1

AQ - Ground Water

EPA 504.1 EPA 504

NAS JAX- N2872 KJ0050120

Date Sampled: 01/03/02

Date Received: 01/04/02

Percent Solids: n/a

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch Run #1 DD04578.D 1 01/07/02 SKW 01/07/02 OP4481 GDD170

Run #2

Matrix:

Method:

Project:

CAS No. Compound Result RL Units Q

 $106\text{-}93\text{-}4 \qquad 1,2\text{-}Dibromoethane \qquad \qquad ND \qquad \qquad 0.020 \quad ug/l$

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 1

Client Sample 1	D:	IAX-HI	PTP-N	/W05-01
Chent Sample	ιν. ,	14 24 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		111100 01

Lab Sample ID: Matrix:

F11944-1

Date Sampled: 01/03/02 Date Received: 01/04/02

Method:

AQ - Ground Water FLORIDA-PRO SW846 3510C

DF

Percent Solids: n/a

Project:

NAS JAX- N2872 KJ0050120

Analytical Batch Prep Batch OP4483 GOP716

Run #1 Run #2

Compound CAS No.

File ID

OP19177.D

Result

RL

Units Q

Prep Date

01/07/02

Ву

SKW

0.25

mg/l

CAS No. Surrogate Recoveries Run# 1

ND

Analyzed 01/08/02

Run# 2

Limits

84-15-1

o-Terphenyl

TPH (C8-C40)

104%

55-130%

ND = Not detected

 $B = Indicates \ analyte \ found \ in \ associated \ method \ blank$

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: JAX-HPTP-MW05-01

Lab Sample ID:

F11944-1

Date Sampled: 01/03/02

Matrix:

AQ - Ground Water

Date Received: 01/04/02

Project:

NAS JAX- N2872 KJ0050120

Percent Solids: n/a

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	1.9 B	5.0	1.2	ug/l	1	01/09/02	01/09/02 DM	SW846 6010B	SW846 3010A

TETRA TECH NUS, INC. **CHAIN OF CUSTODY** NUMBER HPTP-DIOSOS-A PAGE 1 OF 1 PROJECT NO: SITE NAME: PROJECT MANAGER AND PHONE NUMBER LABORATORY NAME AND CONTACT: N2872K50050120 Greg Roof 904- 291-0400
FIELDOPERATIONS LEADER AND PHONE NUMBER HPTD Accutest L. Williams SAMPLERS (SIGNATURE) ADDRESS Joe Ferranti 904-281-0400 CARRIER/WAYBILL NUMBER 83116072 7439 FEO EX Orlando 32811 CONTAINER TYPE PLASTIC (P) or GLASS (G) STANDARD TAT **PRESERVATIVE** USED OF CONTAINERS 2002 GRAB (G) COMP (C) DATE YEAR TIME Š COMMENTS SAMPLE ID 1333 JAX-HPTP-MW05-01 3 2 11 2 cool to 4°C 3 2 GW

CITY STATE 10-40MM-919H-XAX 211/60/10 1. RELINQUISHED BY 1. RECEIVED BY DATE DATE //4/02 DATE TIME 01/03/02 10:00 TIME 2. RECEIVED BY TIME 3. RELINQUISHED BY DATE TIME 3. RECEIVED BY DATE TIME COMMENTS DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 3/99

FORM NO. TINUS-001